ded: that all thoſe to whome the Lord hath giuen any meanes of ſtopping this gap, where at his wrath hath thus broken in vpon vs, make haſt to the reſcue of the trueth, and reſiſtance of the euill.

Firſt of all therefore we muſt all humble our ſelues vnder the reuenging hand of GOD, in prayer and faſting, in ſackcloth and aſhes: that if by ſtanding before the Iudge, and confeſſing our giltineſſe of crime, wee doe put the halter as it were aboute our owne necks, hee may peraduenture haue compaſſion on vs, and repente him bothe of this, and other the euils which hee threateneth againſt vs. The exerciſe whereof ought (without all controuerſie) to bee publike: to the end, that the Church with all hir Children together lying proſtrate before his Maieſtie, all their cryes & complaints at once ſent vp, may ſo ring in his eares, as that he may be the rather moued to pittie towardes her. But if it be holden out, from the publike aſſemblyes: then the Lorde caſteth this charge of ſanctifying a faſt vppon priuate and common houſes. And if the priuate houſes bee ſparred againſt it, through their careleſſe Maiſters: yet let euery faithfull perſon, who trembleth and quaketh when the Lorde roareth, take him to his Chamber for the humbling and ſubmitting of himſelfe before his GOD.

Then her Maieſtie is heere moſte humbly to bee deſired that that God which hath preſerued her royall perſon vnto the crowne, and in the crowne, from all the treaſons intended againſt her: may haue her ſword (or rather his owne ſwoorde committed vnto her) drawne vppon theſe horrible treaſons, which are in a high hand committed directly againſt his own perſon: to the launchinge of ſuch as are curable, and to the

quite

quite cutting off of thoſe that are deſperate, the Captaines eſpecially. Her moſte honourable Councel, is likewiſe moſt humbly to be deſired, that they would ſo croude vp other their weightie and graue conſultations, that this alſo which in weightineſſe, giueth place but vnto few, may haue the rowme that it deſerueth. Namely how her Maieſties Swoorde, may be moſt coningly and rightly handeled, for the ſpeedieſt and effectualleſt riddaunce heereof. Her worſhipfull Iuſtices and other inferiour Magiſtrates, that they would ſo diligently waite vppon the execution: as that they remember, that the greater haſt they make againſt them, the greater ſtay the Lorde will make in his iudgement againſt vs. The carefull miniſters of the land, that they would not onely labour to kepe their flockes from the contagion of this peſtilence: but ſeek alſo to pull ſuch out of the fire, as through ſimple ignorance haue fallen into it. The godly people, that they would remember dayly ſo to commend the good ſucceſſe of both the miniſteries, of the worde and of the ſworde, vnto the Lord: that the proſpering in the ſubduing of this deteſtable hereſy, it may (by continuance of a godly peace) go well with them and theirs after them. So ſhall not onely the euill it ſelfe, but alſo the ſlaunderous charges againſt the Goſpel, be cleane wiped away: whileſt the hereſies which ſprang without the fault of the Goſpel, ſhall be remooued by the power of the Goſpel: & whilſt the euils which roſe through the ſleepineſſe of ſome of the profeſſors, ſhall be put downe through the watchfulneſſe of them all: whileſt finally this hereſie being of ſome confuted, of other ſome puniſhed, prayed againſt of all: the Goſpell may haue a greater triumph in the conqueſt of this hereſie, then if it had neuer beene inuaded by it.

FINIS.

The

admitted, there were yet ſome wall or raile to holde them in, vntill ſuch time as they might bee better taught: The careleſſe receiuing of them, might haue beene ſomewhat recompenced by a narrowe watche and warde, that they ſhoulde not iſſue out againe. But both the gates of our entring in, and going out, being thus vnkept: there groweth vnto the Church an infamous ſlaunder, whileſt they are all iudged to haue beene of our Religion, the greateſt number whereof haue beene ſuch babes therein, as they knewe not the difference betwene their right and left hand. So that the bare name of Goſpellers excepted, which they gat by treading now and then vpon the pauement of our aſſemblies: they ſtill remained in the ſame ignoraunce of the truth, wherein they were at firſt. Where againe it appeareth, howe vniuſtly the Goſpell is charged with theſe fallings away, which it woulde haue ſtayed, if it might haue had the full courſe: as is to be ſeene in other places, where the ſame Goſpell being receiued, ſuch offences ſo thicke and threefold haue not enſued. For this happineſſe, that no offences at all ſhould bee: happened not vnto the Churches gouerned by the Apoſtles themſelues.

¶ This then being a great peece of our fault, for that we met not with theſe miſchiefs aforehand: another peece is, that due care hath not bene taken, for the aboliſhing of them, after they were entred in vpon vs. Wherevnto albeit (as is aforeſayd) diuerſe godly, both Magiſtrates and Miniſters haue put to their hand: yet as in a houſe ſet on fire, all runne to the quenching of it, ſo it behoued that to the ſuppreſsing of this fire, comming forth of the bottomleſſe pit of hell, all ioyntly ſhoulde haue giuen their attendance, and euerie one haue drawne a bucket of thoſe waters, which the Iſraelites did in their calamitie. For I meane not, that they ſhoulde haue met 1. Sam. 7. 15.

to deale with the familie of loue: but with the Lorde our God. Who as in his iuſt wrath, hee hath raiſed vp this curſed ſect: ſo vnleſſe the ſame bee firſt appeaſed, in humbling our ſelues before him in prayer with weeping and faſting, our eyes may faint in our heades with looking for remedie either of this euill or of any other, that hang ouer vs.

But I ſee well enough what the cauſe is: why in ſo great an ouerplus of cares for other things, there is yet ſo ſmall care taken of this, and it is, becauſe it is not eſteemed perillous vnto the eſtate. So (by the way) is the glorie of God troden vnder our feete, which howſoeuer it be defaced: yet ſo that it be imagined (for truly it cannot be) without hazard of the eſtate, there is almoſt none that layeth it to his heart. But yet tell mee (I pray you) howe come we to be ſo ſecure of the eſtate againſt this route of heretikes. For let it not hurt the eſtate, that it is the peſtilenteſt hereſie that euer was in the land, that it leaueth neuer a peece of the knowledge of GOD whole and vnſhaken, that it is a maſſe or packe of Poperie, Arianiſme, Anabaptiſme, and Libertiſme: I ſay let all this not once touch the foote of the eſtate, which notwithſtanding preaſeth to the verie throate of it: yet that it maketh no conſcience of anie duetie to men, their owne brood onely excepted, that they may lie to all, ſo they ſay true to themſelues, that they thinke euerie thing lawfull (how filthie and howe diſorderly ſoeuer) that their fantaſticall ſpirite telleth them, doeth it not goe ſtraitly and directly to the ouerthrowe of the cõmon wealth? For if it ſhoulde but ſuddenly come into the giddie pate of one of their perfites, that there ought to be no Magiſtrate, or that none ought to bee better than other, or poſſeſſe more then other: it muſt bee by and by holden for ſo reſolute a doctrine amongeſt them,

as

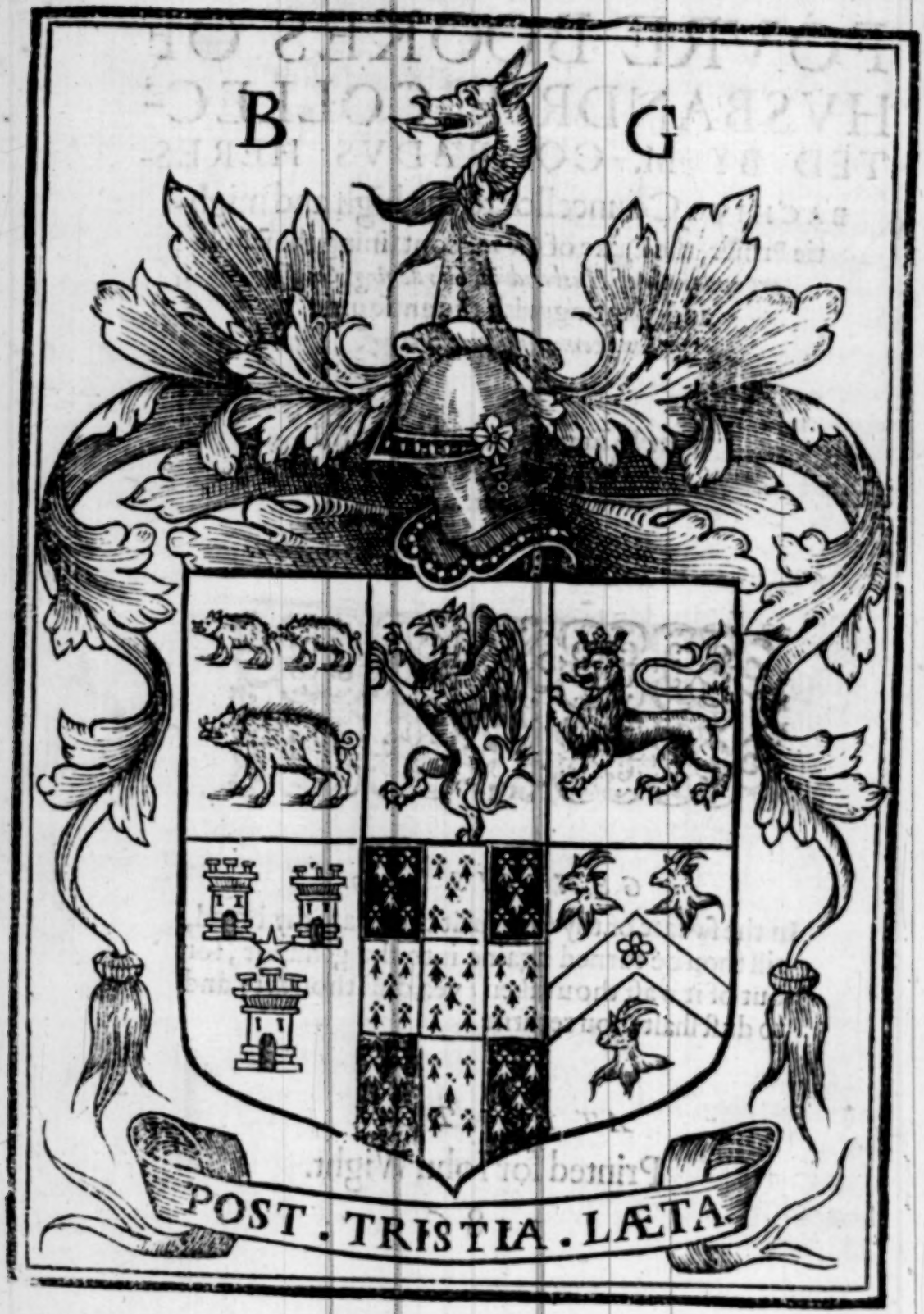
FOVRE BOOKES OF HVSBANDRIE, COLLECTED BY M. CONRADVS HERESBACHIVS, Councellor to the high and mightie Prince, the Duke of *Cleue*: containing the whole *art and trade of Husbandrie, Gardening, Graffing,* and planting, with the antiquitie *and commendation thereof.*

Newly Engliſhed, and increaſed *by Barnabe Googe,* Eſquire.

GENESIS. 3. 19.

In the ſweate of thy face ſhalt thou eate thy bread, till thou be turned againe into the grounde, for out of it waſt thou taken: yea, duſt thou art, and to duſt ſhalt thou returne.

AT LONDON,
Printed for Iohn Wight.
1586.


B
G
POST . TRISTIA . LÆTA

TO THE RIGHT WORshipfull, his very good freend, *Syr William Fitz Williams*, Knight.

IF such as haue painfully and faithfully of long time serued their Prince and Countrey abroad, doe most of all others deserue, beside their cõdigne reward, the benefite of a quiet and contented life at home, I knowe no man (good Syr William Fitz Williams) that of right may better challenge it, then your selfe: who for the long time of your painfull seruice, the trustie discharging of the treasureship of Ireland, and your worthy gouerment (while it pleased her most excellent Maiestie to appoint you for the said Realme her highnesses Deputie) haue so behaued your selfe, as euen your very enimies (whereof I knowe you had good store) haue been forced to giue you, will they nill they, your iust deserued commendation. I leaue to remember your sundry and troublesome trauailes, your Gentlemanly mind, alwaies vnweeried and vnmated with what so euer peril or hazard happened: I passe ouer (because I knowe you delight not in hearing your prayses) that honourable, and worthy for euer to be Chronicled, charge giuen vpon the Oxeale at Monham, in the rescue of your miserably distressed and slaughtred companions, and Countreymen, of which there be sundry yet remayning, that will attribute the hauing of

their liues (next vnto God) to the prosperous successe of your valeaunt enterprise: neither hath this your loyall seruice to your Prince and Countrey at any time been accompanied, without a feruent and zealous affection towardes the Almightie, the chiefest and onely beautie of all mans actions. Since thus (as I saide) you may iustly chalenge for the good seruice you haue done in your youth, a place and time of rest and quietnesse in your greater yeeres, and that there is, in my fancie, no life so quiet, so acceptable to God, and pleasant to an honest minde, as is the life of the Countrey, where a man, withdrawing himselfe from the miseries, vanities, and vexations of this foolish and nowe too too much doting world, may giue himselfe to the sweete contemplation of God, and his workes, and the profite and reliefe of his poore distressed neighbour, to which two thinges we were chiefely created, I thought it good to sende you here (as a token and testimony of my thankefull minde, for your sundry friendshippes and curtesies shewed vnto me) a rude draught of the order and maner of the saide Countrey life, which you may vse (if it please you) for your recreation: and afterwardes (if so you thinke it meete) publish vnder your protection, to the commoditie and benefite of others.

Fare you well in great haste, from Kingstone, the first of Februarie.

1577.

Your assured louing friend,
Barnabe Googe.

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THE EPISTLE TO the Reader.

I HAVE thought it meete (good Reader) for thy further profite and pleasure, to put into Englisſh, theſe foure bookes of husbandry, collected and ſet foorth, by M. CONRAD HERESBATCH, a great and a learned Counceller of the DVKE of Cleues: not thinking it reaſon, though I haue altered and increaſed his worke with mine owne readings and obſeruations, ioyned with the experience of ſundrye my friendes, to take from him (as diuers in the like caſe haue done) the honour and glory of his owne trauaile: Neither is it my minde, that this either his doings, or mine, ſhould deface, or any waies darken the good enterpriſe, or panefull trauailes of ſuch our Countriemen of England, as haue plentifully written of this matter: but alwaies haue, & doe giue them the reuerence and honour due to ſo vertuous and well diſpoſed Gentlemen, namelie, Maſter Fitzherbert, and Maſter Tuſſer, whoſe workes may, in my fancie, without anie preſumption, compare with any their Varro, Collumella, or Palladius of Rome. You haue here ſet downe before you, not onelie the rules and practiſes of the old ancient husbandes, as well Greekes as Latines, whoſe verie orders (for the moſt part) at this daie we obſerue, and from whom (if we will confeſſe the truth) we haue borrowed the beſt knowledge and skill, that our skilfulleſt husbands haue: but alſo haue ioined herewithall, the experience and husbandrie of our owne husbands of Englande, as farre as either mine owne obſeruations, or the experience of ſundrie my friendes would ſuffer me. And though I haue delt with many, both Graines, Plantes, and Trees, that are yet ſtrangers, and vnknowne vnto vs, I doe no whit doubt, but that with good diligence and husbandry, they may in ſhort time ſo be deniſend and made acquainted with our ſoile, as they will

proſper as well as the old inhabitantes. It is not many ages agone, ſince both the Peache, the Piſtace, the Pine, the Cypreſſe, the Walnut, the Almond, the Chery, the Figge, the Abricock, the Muſke roſe, and a great ſort of others, both Trees and Plantes, being ſome Perſians, ſome Scythians, ſome Armenians, ſome Italians, and ſome Frenche, all ſtrangers and aliantes, were brought in as nouelties amongſt vs, that doe now moſt of them as well, yea and ſome of them better, being planted amongſt vs in England, then if they were at home. I haue alſo been carefull about the planting and ordring of the Vine, though ſome of my frendes would haue had it omitted, as altogether impertinent to our countrey: becauſe I am fully perſwaded (if diligence, and good huſbandry might be vſed) we might haue a reſonable good Wine growing in many places of this Realme: as vndoubtedly we had immediatly after the Conqueſt, till partly by ſlouthfulneſſe, not liking any thing long that is painefull, partly by Ciuill diſcord long continuing, it was left, and ſo with time loſt, as appeareth by a number of places in this Realme, that keepes ſtil the names of Vineyardes: and vppon many Cliffes and hilles, are yet to be ſeene the rootes and olde remaines of Vines. There is beſides Nottingham, an auncięt houſe called Chilwel, in which houſe remaineth yet as an auncient monument in a great windowe of glaſſe, the whole order of planting, proyning, ſtamping and preſſing of Vines. Beſide, ther is yet alſo growing an old Vine, that yeeldes a Grape ſufficient to make a right good wine, as was lately proued by a Gentlewoman in the ſaid houſe. There hath moreouer good experience of late yeeres been made, by two noble and honorable Barrons of this Realme, the Lord Cobham, and the Lord Williams of Tame, who both had growing about their houſes as good wines, as are in many places of France. And if they anſwered not in all pointes euery mans expectatiō, the fault is rather to be imputed to the malice and diſdaine peraduenture of the Frenchmen that kept them, then to any ill diſpoſition, or fault of the ſoile. For where haue you in any place better, or pleaſanter wines, then about Backrach, Colin, Andernach, and diuers other places of Germany, that

haue

naue in a maner the ſelfe ſame latitude and diſpoſition of the Heauens that we haue? Beſide, that the nearenes to the ſouth, is not altogether the cauſer of good wines, appeereth in that you haue about Orleans, great ſtore of good and excellent wine: whereas, if you goe to Burges, two daies iourney farther to the South, you ſhall finde a wine not woorth the drinking. The like is (as I haue harde reported by Maſter D. Dale, Embaſſadour for her Maieſtie in theſe partes) of Paris, and Barleduke, the Towne being Southward, with noughty wines: the other, a great waies farther to the North, with as good wines as may be. But admitte England would yeelde none ſo ſtrong and pleaſant wines as are deſired (as I am fully perſwaded it would) yet is it woorth the tryall & the trauaile to haue wines of our owne, though they be the ſmaller: and therefore I thought it not meete to leaue out of my booke the ordring & trimming of vines. It remaineth now (good Reader) that thou take in good part my trauaile and good will, which were cheefely employed to the pleaſuring and benefiting of thee, and not to quarell with me, as is the maner of the moſt ſort, for euery fault and ouerſight that hath eſcaped my hands, nor to looke for any curious, or well meaſured ſtile, wherewith I am not able to ſatisfie thee, and though I were, yet were it neither for the matter nor method neceſſary. And therfore I truſt thou wilt accept it as it is, ſpecially conſidering, that I neither had leiſure, nor quietneſſe at the doing of it, neither after the doing had euer any time to ouer looke it, but was driuen to deliuer it to the Printer, as I firſt wrote it: neither was I priuie to the printing, till ſuch time as it was finiſhed. And therefore (though there be faultes, and great faultes in it) I am not to be charged with them, that if time, or oportunitie had ſerued, would not haue ſuffered them.

(.˙.)

Farewell.

¶ The names of such Authors, and Husbands, whose authorities, and obseruations are vsed in this Booke.

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Theocritus.
Solon.
Xenophon.
Plato.
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Nicander.
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Alexander Aphrod.
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Lucian.
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Constantine.
Cassianus.
Didymus.
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Ruellius.
Fuccius.
Mathiolus.
Cardanus.
Tragus.

S. Nich Malbee.
M. Cap. Byngham.
M. Iohn Somer.
M. Nicas. Yetzwert.
M. Fitzherbert.
M. Willi. Lambert.
M. Tusser.
M. Tho. Whetenhall.
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Wheate and the Vine floure together. 27.a
Wine of apples. 88.b
Wine of peares. 89.a
Walnut tree his vſe. 108.b
Walnut tree foreſheweth his fall. 107.b
Wools the beſt. 137.b
Water Betony, his vertues. 192.a

Y.

Yewe tree his vſe. 109.a

Z.

Zea. 29.a
Ziziphos. 90.b

FINIS.

entreatyng of earable ground, tyllage, and pasture.

Cono. Rigo. Metella. Hermes.



METHINKETH I heare a neighing and trampling of horses without, goe HERMES, goe know what strangers there are. CONO.

HERMES. Syr, yf my sight fayle me not, it is RIGO, the principall Secretarie.

METELLA. A goodly matter, scarse haue you been two dayes at home, and nowe you must be sent for agayne to the Court, perhaps to be sent abrode in some embassage.

CONO. God forbyd, iudge the best, it may be he comes to see me of curtesie and frendship.

RIGO. Ah maister CONO, I am glad I haue founde you in the middes of your countrey ioyes and pleasures: Surely you are a happy man, that shifting your selfe from the troubles and turmoyles of the Court, can picke out so quiet a life, and geuyng ouer all, can secretly lye hid in the pleasant Countrey, suffering vs in the meane time to be tost and torne with the cares and businesse of the common weale.

CONO. Surely I must confesse I haue taken a happy way, yf these goddes of the Earth would suffer me to enioy suche happinesse, that haue bequeathed the troublesome and ambitious life of the Court to the bottome of the Sea. But what? doo you intend to bring me againe to my olde troubles, being thus happily discharged?

RIGO. Nothing lesse, though I woulde be very glad you should not so hastily forsake the Court, nor ridde your selfe from the affayres of the common wealth. You know we are not borne to liue to our selues, nor at our owne pleasures: but for our countrey, our common weale and state whereto we are called. There can not be a woorse thing, then for a man to suffer his countrey forsaken, to come into the handes of villanous persons, and to reioyce with him selfe, that being out of Gunshot, he hath left the hurlie burlie of gouernment. And though Cato had no

neede of Rome, yet Rome and Cato his freendes had neede of hym.

CONO. I graunt you, as long as yeeres and strength wyll beare it, wee are bound to serue in our vocation: but as you your selfe are driuen to confesse, there is sometime a reasonable cause of geuing ouer. Lucullus is highly commended, that whyle his body was strong and lusty, he applied him selfe wholy to the seruice of his Countrey, and that after his honourable seruice both abrode and at home, in the ende he got him selfe quietly agayne to his booke. And Scipio, who after he had conquered both Carthage and Numidia, was content rather to leaue of and rest him selfe, then to doo as Marius dyd, who after so many woorthy victories and atchiued honours, coulde not content him selfe when he was well, but puft vp with vnmeasurable desyre of glory and gouernment, would in his olde age contend with young men, whereby he brought him selfe at the length to most miserable miserie. Surely Cicero tooke a better way by much, when after the ouerthrowe of Catelins conspiracie, he rather contented him selfe to liue quietly at home, then by ambitious intermedling with the contentions of the common wealth, to bring him selfe in danger of his lyfe. The desyre of bearing rule in a common weale, is to be moderated with a certaine bounded modestie, specially in this age of ours, when Courtes are subiect to suche enuies, hatreds, flatteries, slaunders, couetous and ambitious desyres, and where no place is left for vertuousnesse and christian simplicitie. These are the thinges that moue Socrates and Plato from their common weales, and doo likewyse keepe me, being nowe of good yeeres and sickely, ẏ Court forsaken, in this my poore cottage at home.

Lucullus.

Scipio.

Cicero.

RIGO. Yea, but age is no sufficient excuse for you to leaue the gouernyng of your countrey. You knowe ἔργα νέων βυλαὶ γερόντων, the labour of young men, and the counsell of olde men, and how those common weales are safely alwayest guided, where olde mens heads, and young mens armes are stirryng. Father Nestor got great commendation for his counsell at the siege of Troy, where as Peleus and Laertes were despised, and accompted for benchwhistlers at home.

Nestor.

ἀκκρῆτης

CONO. Some are tickled with glory: some with gaine, gifts, and

and rewardes, retayne the Cockrowen Courtiers, yea suche as haue one of their feete alredy in the graue. Now yf we woulde content our selues with this lyfe, and geue our selues to the true and perfect lyfe,

In Princes Courtes vve should not gape nor gase,
Nor yll succesſe in sutes should vexe our mynde:
No vayne nor fond deuise our eyes should dase,
Nor levvde affection should our fancie blynde.
All suche thynges should be left and layde asyde,
Novve lyues alas eache out of order quite:
And to our shame the tyme avvay dooth slyde,
All seeke to lyue, but none to liue vpryght.

As the Poete excellently well wryteth in his Epigrame, it were part of a mad man or a coxcome to runne headlong without any profite into danger, when as he may liue godly and quietly at home without all trouble, as our olde fathers were woont to doo.

RIGO. It is very true, the Poete accompteth him blessed to whom this lyfe can happen: But in the meane tyme you are alone, and leade your lyfe with beastes, lowtes of the Countrey, and trees, that haue spent all your tyme before among wyse and honourable personages. Socrates affyrmeth wysdome to be learned in Cities, and not among beastes and trees. Socrates.

CONO. Socrates his iudgement, though I wyll not gaynesay, yet it appeareth by his disputations with Iscomachus in Xenophon, that he dyd not disalowe the Countrey mans lyfe. And as for my liuing alone, it almost happeneth here to me, as Cicero reporteth Scipio to say, that he was neuer lesse alone, then when he was alone: for being alone, I haue continuall conference with the graueſt and wyſeſt men. For eyther I apply my self wholy to the sacred oracles of the Prophetes and the Apostles, who teach the true wysedome, by which both Kinges rule, and Princes gouerne, and by which our soules (whiche we cheefely ought to regard) are fedde, whiche also shewe vnto vs the perfect way to that euerlasting Court aboue: or when I list, I haue the company of the greateſt Princes and Monarchies of the worlde, with whom I conferre of the doubtful state and gouernement of common weales, in reading the Histories and Chronicles of the The vse of a solitarie lyfe.

worlde, trauayling as it were throughout all nations, or readyng the woorkes of such as write in husbandrie, I occupie my minde in the beholdyng the woonderfull woorkemanship of GOD in Trees, Plantes, and Beastes, whereby in the Creature, I acknowledge the Creator. And besides these dumbe companions, my freendes come sometime to see me, sometime Gentlemen, sometime Noblemen, sometime the Prince hym selfe vouchsafeth to visite me: so that there is scarsely any day but that some come vnto me, some for their pleasure, some for good wyll, and some for their businesse: For to my freendes and my neyghbours, I neyther denie my counsell, nor my trauayle. Therefore is it very expedient that good choyse be made of Lawyers, and discreete men for the Countrey, alwayes prouided, they geue their counsell free and without wages. Many times beside, you from the Court sende me hyther processe and arbitrementes to be tryed before me. Thus haue I in the Countrey sweeter and pleasanter company then you haue, eyther in the Court or Citie.

RIGO. Tell me then I beseeche you, howe you bestowe your time, and howe you are occupied all the day: for I doubt not but you doo as much as in you lyeth to spend the time as profitably as you may.

CONO. I wyll tell you throughly, and not dissemble with you, yf ye wyll geue me the hearing, and to begin, I wyll vse the woordes and verses of the foresaide Poete, though in other his writinge s scarse honest, yet in this speaking very graue & wyse.

Fyrst serued on knees the Maiestie diuine,
My Seruantes next and ground I ouerlooke:
To euery man his taske I doo assigne,
VVhen this is doone I get me to my booke.

I vse commonly to ryse first of all mee selfe, specially in Sommer, when we loose the healthfullest and sweetest time with sluggishnesse. Aristode accompteth early rysing to be best both for health, wealth, and studie. In the Winter yf I be loth to ryse, yf either the vnseasonablenesse of the weather, or sicknesse cause me to keepe my bed, I commit all to my Steward, whose faith and diligence I am sure of, whom I haue so well instructed, that I may

may safely make him my deputie, I haue also Euriclia my maide, so skilfull in huswyferie, that she may well be my wyues suffragan, these twayne we appoynt to supply our places: but yf the weather and time serue, I play the woorkemaister mee selfe. And though I haue a Bailiffe as skilfull as may be, yet remembring the olde sayeing, that the best doung for the feelde is the maisters foote, and the best prouender for the horse the maisters eye, I play the ouerseer mee selfe. That it is holsome to ryse betimes, I am perswaded both by the counsell of the most graue Philosophers, and besides by myne owne experience. When my Seruantes are all set to woorke, and euery man as busie as may be, I get me into my Closet to serue GOD, and to reade the holy Scriptures: (for this order I alwayes keepe, to appoint mee selfe euery day my taske, in reading some part eyther of the old Testament or of the newe): that doone, I write or reade such thinges as I thinke most needefull, or dispatche what businesse so euer I haue in my house, or with Sutars abrode. A litle before dinner I walke abrode, if it be faire, eyther in my Garden, or in the Feeldes, if it be foule, in my Galerie: when I come in, I finde an Egge, a Chick, a peece of Kid, or a peece of Veale, Fishe, Butter, and suche like, as my Foldes, my Yarde, or my Dayrie and Fishpondes wyl yeelde, sometime a Sallet, or such fruites as the Garden or Orchard dooth beare: whiche victuals without any charges my wyfe prouidethme, wherewith I content mee selfe aswell, as yf I had the dayntiest dishe in Europe. I neuer lightly sit aboue one houre at my meate: after dinner I passe the tyme with talking with my wyfe, my seruantes, or yf I haue any, with my ghestes: I rise and walke about my ground, where I viewe my woorkemen, my pastures, my medowes, my corne, and my cattel. When I am in the Countrey, I goe euery day, yf the weather be good, and no other great businesse, about my grounde: if not euery day, at the least once in two or three dayes: as oftentas I come to the Citie from the Countrey, I doo the like, to vnderstand howe my ground is husbanded, and what is doone, what vndoone: neither doo I euer goe about it, but some good commeth of my trauayle. In the meane whyle I beholde the woonderfull wysdome of Nature, and the incompre-

Euriclia.

The best doung for ground is the maisters foote.

henſible woorking of the moſt mightie GOD in his Creatures, which as Cicero truely affirmeth, is the delicateſt foode of the Soule, and the thing that maketh vs come neereſt vnto God. Here way I with mee ſelfe, the beneſites and woonderfull woorkes of God, who bringeth foorth Graſſe for the cattell, and greene Herbe for the vſe of man, that he may bring foode out of the Earth according to the Pſalme. Heere he preacheth to me.

Academ. queſtio. lib. 1.

Pſalm. 104.

The fruitefull Earth that tyld in ſundry vvyſe,
Vnto the eye her goodly fruites dooth yeelde:
The Violettes ſvveete that eache vvhere thicke doo ryſe,
And ſtayne vvith purple dye the pleaſant feelde,
The feelde vvith hearbes, the hearbes vvith branches braue,
The glittring flovvres that shine like ſtarres of lyght,
And ſpringyng faſt diſcloſe the grace they haue,
Eache hearbe vvith ſundry flovvre moſt ſvveete in ſyght.

What woorkeman is there in the woorld, that is able to frame or counterfeyte ſuche heauenly woorkes? Who could of a ſclender graſſe make Wheate or Bread, and of a tender twigge bring foorth ſo noble a licour as Wine? but only that mightie Lorde that hath created all thinges viſible and inuiſible. With theſe ſightes doo I recreate my mind, and geue thankes vnto GOD, the creator and conſeruer of all thinges, for his great and exceeding goodneſſe, I ſing the ſong, to thee O Lorde belongeth prayſes in Sion, or, praiſe thou the Lorde O my ſoule. &c. beſeeching GOD to bleſſe the gifts that he hath geuen vs through his bounteous liberalitie, to enriche the Feeldes, and to proſper the Corne and the Graſſe, and that he wyll crowne the yeere with his plenteouſneſſe, that we may enioy the fruites of the Earth with thankeſgeuing, to the honour of him, and the profite of our neighbour. Then returning home, I goe to writing or reading, or ſuche other buſineſſe as I haue: but with ſtudy, or inuention, I neuer meddle, in three houres after I haue dyned. I ſuppe with a ſmal pittans, and after ſupper I eyther ſeeldome or neuer write or reade, but rather paſſe the time in ſeeing my Sheepe come home from the Feelde, and my Oxen dragging home the Plowe with weerie neckes, in beholding the pleaſant Paſtures ſweetely ſmelling about my houſe, or my heardes of cattel lowing hard by me: ſometime I liſt to reſt me vnder an old

Holme,

Holme, sometime vpon the greene grasse, in the meane time passeth by me the pleasant Riuer, the streames falling from the springes with a comfortable noyse, or els walking by the Riuer side, or in my Garden, or neerest pastures, I conferre with my Wife or Seruantes of hus bandry, appointing what I wil haue doone: if my Bailiffe haue any thing to say, if any thing be to be bought or solde: for a good hus band, as Cato sayth, must rather be a sellar then a byer. Sometimes (specially in Winter) after supper, I make my Minister to tell something out of the holy Scripture, or els some pleasant storie, so that it be honest and godly, and such as may edifie. Two or three houres after supper I get me to bedde, and commonly as I saide before, the last in the house, except my Chamberlayne and my Steward.

A good hus-band must rather be a sellar then a byer.

RIGO. In the meane time being farre from the Churche, neither can you heare the sermons, nor be present with your wyfe & your household at seruice: for your owne part though ye may supply the matter with reading, yet your wyfe and your seruantes can not so doo.

CONO. For my part (without vaunt be it spoken,) I haue seruice euery day at certaine appointed houres, where preacheth to me dayly the Prophetes, the Apostles, Basil, Chrisostome, Nazianzen, Cyril, Ciprian, Ambrose, Austen, and other excellent preachers, whom I am sure I heare with greater profite, then yf I shoulde heare your sir John lacklatines and foolishe felowes in your Churches. My wyfe also being geuen to readyng, readeth the Byble and certaine Psalmes translated into our owne tongue, if there be any thing to hard or darke for her, I make her to vnderstand it: besides, she hath priuate praiers of her owne that she vseth: in the meane time I haue one, that vppon the holy dayes (if the weather or our businesse be such as we can not goe to Church) readeth the Gospell, teacheth the Catechisme, and ministreth the Sacramentes when time requires: but in the Sommer time, if the weather be not vnreasonable, we goe alwayes vpon the Sundayes and Festiuall dayes to our Parishe Churche, where we heare our Curate, and receaue the blessed Communion: as for my household, I bring them to this order, that they alwayes serue God before their going to woorke, and

at their comming to myndes. It is written of Anthonie the Ermite, that being demaunded of a certaine Philosopher, howe he coulde in the solitarie wylderneſſe without any bookes, occupie him ſelfe in the ſtudie of diuinitie: He anſwearedthat the whole worlde ſerued him for bookes, as a well furniſhed Libyarie, in which he alwayes read the woonderfull woorkmanſhip of God, which in euery place ſtood before his eyes. In the like ſort haue I my houſehold ſeruantes well inſtructed in the cheefe groundes of true religion, who leanyng to their vocation and innocencie of their life, not caried away with the vaine entiſementes and pleaſures of Cities, doo beholde the Maieſtie of GOD in his woorkes, and honour the Creator in his Creatures, not only vpon the Sundayes, but euery day through the yeere, where they may alſo heare the litle Birdes, & other creatures in their kindes, ſetting out the glory and Maieſtie of God.

The ſaying of ſaint Anthonie.

RIGO. You ſeeme to tell me of a Schoole of diuinitie, and not of a huſbandmans Cottage, this was the very order of the Patriarkes, and the Monaſteries in the Primatiue Churche.

CONO. In deede Chriſoſtome would haue all Chriſtians, maried folkes and vnmaried, to leade their liues according to the rule and order of Monkes: but of ſuch Monkes as liued in thoſe dayes, not ſuch good ſelowes as ours be nowe: for the profeſſion of a Monke in that age, was no other but the life of the pureſt and perfectest Chriſtians, whiche kinde of life the olde Patriarkes as the Scriptures doo witneſſe did leade.

Homelie. 56 vpon the. 16 of Matth. and in other places.

RIGO. I oftentimes woondred, that hauing ſo goodly a houſe and ſo well furniſhed in the Citie as you haue, what you meant to deſire rather to dwell in the Countrey: but nowe that I ſee the good order of your life, I leaue to woonder any longer.

CONO. It is naturall to me, and left me by my parentes, to delight in huſbandrie: for my Father, my Graundfather, my great Graundfather, and as farre as I can feeche my petigree, all my Auncestours were occupiers of huſbandry, and were all borne and died in this houſe that you ſee.

RIGO. I remember not long ſince, being in buſineſſe with the Chauncellour Hypſographus, a ſober man, your neighbour, and one that delightes in huſbandry, it was my chaunce to ſee your fa-

ther,

ther, surely a man would haue taken him for olde Laertes in Homer, or rather for Abram, or Isahac, and as the Chauncellour tolde me, he was foure score and tenne yeeres olde: but so faire he bare his age, as I tooke him to be scarse fiftie, his memorie and iudgement seemed to serue him woonderous well, he would talke of the orders of the Countrey, of the antiquities there abouts, of the stories of the Scripture, so sweetely and eloquently, as I was woonderfully in loue with him: he had the Prophetes and the Euangelistes at his fingers endes, so that I sawe the noble men had him in estimation, not without great cause.

CONO. In deede he tooke suche delight in the holy Scriptures, as no day passed him without reading some part of them: he vsed to goe commonly euery day to the next Parishe Churche, neither woulde he misse any Sermon that he coulde heare of, he brought both Preacher and Priest into order, and caused them to frame their liues according to the rule of the Gospell.

RIGO. You paynt me here the patterne of a Bishoppe, or an ouerseer: in deede the most part of these Priestes had neede of suche ouerseers to restraine their couetousnesse, the spring of all their abuses.

CONO. To returne to my quietnesse or my husbandry from whence I digressed, doo you yet marueyle howe I can delight mee selfe with this so honest and profitable a quietnesse, then which in the iudgement of the holiest and wysest men, there is nothing more honest nor better, neither is there beside any trade of life more meete for a Gentleman, nor trauayle more acceptable to GOD, then is the tilling of the ground. The people in the olde time (as Cato a man of great wysdome, and a teacher of husbandry dooth witnesse) as oft as they would geue a man the name of an honest man; they woulde call him a good husbande, comprehending in that name as muche commendation, as they could geue him: besides, most mightie Kinges and Emperours were no whit ashamed to professe this trade, as Xenophon reporteth of king Cyrus: the like writeth Quintus Curtius of Abdolominus. Numa the king of the Romanes bare a singuler affection to husbandry, for that he thought there was no kinde of life so fitte to maintaine eyther peace or warres, or for the provision of a mans

The commendation of husbandry.

Emperours and kinges professours of husbandry.

life,

life, being rather a geuer of good life, then richelle. Moreouer, Hiero, Philometor, Attalus, Archilaus, and a great number of Princes more, were delighted with ỳ profession of hus bandry: this knowledge is also highly commended by Homer, the very fountaine in his time of wysedome, whereas he describeth Alcinous the king of the Pheaces, whose delight in the planting and pleasures of his Orchardes was woonderfull. And Laertes the olde man, that with his continuall occupying of hus bandry, brought his minde better to beare the absence of his sonne. Hesiodus in his woorke τῶν ἔργων καὶ ἡμέρων geueth great prayse to Astrea, that being banished the Citie, gaue him selfe to the life of the Countrey: Yea the ground hath beforetime been tilled by the handes of Emperours, the Earth in the meane time reioysing to be torne with a Victorers shaare, and to be plowed with the handes of a trymphant Conquerer, eyther because they dealt with the like regarde in their seede, as in their warres, or vsed suche diligence in the Corne feeldes, as they vyd in the Campe, or els because all things handled with honest and vertuous fyngers prosper the better, beyng more carefully looked to. Serranus when he was called to honour, was found sowing of seede. The Dictators office was brought by the Purceuant to Cincinatus being all naked and besmeared with sweat and dust. The Purceuantes had fyrst their name of calling Senatours and Gouernours, out of the Countrey to the Citie. In like sort had this name at the first, the Fabij, the Pisons, the Curij, the Lentuli, the Ciceroes, the Pilumni, and other auncient houses. Horace telleth, that of hus bandmen haue been bread the valyauntest and woorthyest Souldiers, affyrming that the hand that hath been vsed to the Spade, prooueth often of greatest value in the Feelde. Homer reporteth a great valiancie in Vlisses his Neteard in the slaughter of those felowes that woulde haue rauished his maistresse. Most certayne it is, that a great number of Emperours haue sprong from the Plowe. And to let others goe, it is knowen that the Emperours Galerius and Maximinus, came both of them from poore Peromen to the imperiall dignitie. The like is writen of Iustine, Constancianus, Probus, and Aurelianus. The stories report, that M. Curius the Emperour was found in his house boyling of a Rape roote, when he refused the great summes of golde brought

Serranus.

Cincinatus.

Husbandmē come to be Emperours.

brought by the Sammites Embassadours. What should I speake of the antiquitie of it? the holy Scriptures declare husbandry to be the auncientest of al trades. And to begin with the very beginning of man, and that neither Osyris, nor Dionysius, were the fyrst founders of this knowledge, as the Paynims fable, but that the most mightie Lorde him selfe did fyrst ordayne it: for Adam and his sonnes were all husbandmen, Noe was a planter of Vines, Abraham, Isahac, and Iacob, were shepheardes, Saul from his Asses, and Dauid from his sheepe were called to the crowne, Eliseus and Amos of shepheardes were made Prophetes. Ozias as we reade professed husbandry. Iesus the sonne of Syrache commending husbandry aboue the rest, sayth, he customably vsed him selfe to hold the Plow, to driue the Cart, and to keepe Cattell: but what neede we more? Our Sauiour CHRISTE him selfe gloryeth to be the sonne of a husbandman, and frameth his parables of planting of Vines, of Sheepe and Shepheardes: moreouer, as it is in Luke, our Lorde seemeth to be a teacher of husbandry, where he sheweth, that trees are to be digged about and dunged, that they may prosper the better. For sith this knowledge is of al other most innocent, and without which it is most plaine we are not able to liue: the best and the godliest men haue alwayes imbraced it, and the olde fathers haue euer counted it the very Cosin Germane to wysedome. Cicero calleth it the mistresse of iustice, diligens, and thriftinesse: some others call it the Mother and Nurs of al other artes. For whereas we may liue without the other, without this we are not able to sustayne our life: besides, the gayne that hereof aryseth, is most godly, and least subiect to enuie, for it hath to deale with the Earth, that restoreth with gayne such thinges as is committed vnto her, specially yt it be furthered with the blessing of GOD. The only gentelmanly way of encreasing the house, is the trade of husbandry: and for this cause they were alwayes accompted the perfectest Gentlemen, that, content with the liuing their auncestours left them, liued in the Countrey of their landes, not medling with figging, chopping, and changing, nor seeking their liuing by handycraftes. M. Varro in his time sayth there was great complaint made, that the Fathers forsaking the Plough and the Sicle, began to creepe into the Towne, and busied them selues rather with Pageantes and

The antiquitie of husbandry.

The fyrst planter of Vines.

Husbandry the mother and nurse of all other artes.

The woorthynesse of husbandrie.

and Midsommer games, then with the Vineyard or the Feelde, whereas the Gouernours of Rome so deuided the yeere, as they assigned only the nienth day for businesse of the Citie, and the rest of the time for the tyllage of the Countrey, whereby being hardened with labour in peace, they might the better be able to abyde the trauayle of warres. Whiche Countrey people were alwayes preferred before the people of the Citie, and more Nobilitie thought to be in them that tyld the ground abrode, then in those that liuing idely within the walles, spent their time vnder the shadowe of the Penthouse: except a man wyll, with the common sort, thinke it more honest to get his liuing with the blood and calamitie of poore soules, or not daring to deale with the swoorde to make his gayne of marchandize, and being a creature of the land, contrary to his kind, geue him selfe to the rage of the Seas, and the pleasure of the Windes, wandring like a Birde from shore to shore, and countrey to countrey, or to folowe this goodly profession of bawling at a barre, and for gaine to open his iawes at euery benche. Surely as I saide before, this onely hath been euer counted the innocentest trade of life, of al men, & in all ages. By husbandry were made riche the godly Fathers, Abram, Loth, Iacob, and Ioab: and most certaine it is, that this profession and this gayne, is most acceptable to GOD, when he commaunded Adam to tyll the grounde, and to get his liuing with the sweat of his browes. Thus is husbandry of suche auethoritie, as GOD with his open witnesse hath alowed it, and afterwardes by his seruant Moses hath added his blessing vnto it, saying, I wyl geue the ground my blessing in the sirth yeere, and it shal bring foorth the fruites of three yeeres. And againe, If you wyl keepe my commaundementes, I wyll send you raine in due season, and the Earth shall yeelde her increase, and your trees shalbe loden with fruite, the threasshing time shall last tyll the vintage, and the vintage shall endure tyll the sowing time, and you shall eate your bread with plenteousnesse. What can there be nowe more pleasant to a Christian man, then to get his liuing by suche meanes as he knoweth dooth please GOD, and to play the Philosopher in the most sweete contemplation of the benefites of GOD, and to acknowledge and reuerence the wysedome and power of the

Gene. 3.

Husbandry pleasyng to God.

Leuit. 26.

diuine

diuine Maiestie, and his bountcousnesse to mankinde, to geue him thankes and prayse for his goodnesse, the very hearbes and Creatures in the Feelde in the meane time preaching vnto vs.

RIGO. You frame me here of a hus bandman a diuine, and almost bring me in minde to become a hus bandman, who alwayes hitherto with the common sort, accounted this hus bandry to be a beastly and a beggerly occupation.

CONO. What diuinitie there is in it, and what a feeld of the acknowledged benefites of God, you haue heard. That the common sort doo thinke it a beastly and a beggerly kinde of lyse, it is no marueyle, syth the common people doo neuer iudge aryght. The common people doo woonder at the pompe of the Court, and iudge them for the happiest men, that deckt with golde and purple, are in greatest fauour with Princes, and Officers, and Councellours to them, litle knowing in the meane time what heapes of sorowes lyes hyd vnder that braue and glittering miserie. The common sort preferreth shamefull and beastly delicasie, before honest and vertuous labour, ioying to consume the nyght in drunkennesse, leacherie, & villanie, and the day in sleepe and pastime, thinking suche happy, as neither behold the rysing nor setting of ỳ Sunne. But those that are of sounder iudgement, account the hus bandmen most happy, yf they knewe their owne felicitie, to whom the Earth in a farre quieter maner dooth minister a sufficient liuyng.

And though vvith gorgeous gates the buyldynges hye,
VVith early greetinges alvvayes doo not flovve,
Nor seelyng garnisht gaye vvith Imagrye,
Nor ritche attyre vve see, nor costly shovve:
Yet stedfast state and lyse vnskild of guyle,
VVith vvealth yenough and pastures vvyde at vvyll,
And people strong traynde vp to payne and toyle,
And youth vvith dyet small contented styll,
VVhere godly zeale and vertues all dyd dvvell,
VVhen Iustice last dyd bidde the vvorlde farevvell.

As the Poete hath most grauely written in the prayse of the hus- Geor. 2.
band. Aglaus Sophidius was iudged happy by the Oracle of Apollo, because he occupied a smal corner of Arcadia, but yet sufficient for his

his liuelode, where he spent his life without euer comming abrode: whose order of lyfe sheweth, that he was neither vexed with greedie desyre, neither with any other trouble of minde, as Plinie witnesseth. But I holde you to long with commendation of that which of it selfe is sufficiently commended. Hawe, wyfe, I pray you let vs goe to dinner.

METELLA. You shall syr by and by. God morowe maister RIGO, I thought Xenoplutus had been here, who sleth to fetch my husband away: he hath by chaunce been nowe at home a weeke or twayne, which some misliking, preferre him to most painefull and troublesome businesse, procuring him to be sent in embassage beyond the pyllers of Hercules, and (which they would be lothe to beare themselues) they cast all vppon his backe as a common packhorse, who being nowe olde, reason would he shoulde be spared and suffered to be in quiet, that being at the last free from the turmoyles of the world, he myght geue him selfe to his prayers, and prepare him selfe for heauen.

RIGO. It were more for the benefite of his Countrey, that maister CONO came oftener to the Court, but he is the seldomer there, because he taketh such pleasure in his husbandry: howbeit, I came for no such purpose, but only to visite him, beyng my olde freend.

CONO. You must beare with a womans bablyng.

RIGO. I pray you, sins it is not yet dinner tyme, let vs walke about, that I may viewe your house tyll dinner be redy.

CONO. If it please you, I wyll shewe you my house, where I haue appoynted my kyngdome.

RIGO. Nowe surely you haue as happy & as pleasant a kingdome as may be.

Who is happy.

CONO. In deede I confesse mee selfe happy in this, that contentyng mee selfe with my poore estate, I desyre no more: for as he sayth.

Horace.

The man that most dooth here possesse,
Thou canst not iustly happy name,
But he vvhom GOD vvith giftes dooth blesse,
And vvell dooth knovve to vse the same:
Hym mayest thou rather rightly call,
A happy man aboue them all.

Surely I,

Surely I, in this my kingdome, or rather poore cottage, am more happy then a great sort of Kinges and Princes of the world, that are lordes of so many and so large dominions. Riches are not to be measured by their multitude, but by the minde of the possessor. And as Dauid sayth, a litle is better with the godly, then the great richesse of the wicked. Cincinatus occupied onely foure acres of grounde. Socrates hauyng but twentie markes in all the worlde, was counted a riche man. So I, with Virgil doo commend great possessions, but had rather occupie litle. Therefore looke not to see here the house of Lucullus, or Hyrcius, which is reported to be solde for 4000000. HS. Suche stately dwellinges and marble floores, as Cicero sayth, I despise. VVho is riche.

RIGO. Notwithstandyng, here is all thinges faire, and as it appeareth commodiously buylt.

CONO. For my part, I build my house, as they say, according to my purse, agreeable to my calling, and to my liuing. I wyl shewe you in order howe I haue cast it, folowyng the aduise of Iseomachus in Xenophon, whom Cicero doth greatly commend. And fyrst, the seate of my house hath moued me to builde it after this sort. Cato would haue a man long in determination to builde, but to plant and sowe out of hand. Our fathers herebefore obserued the same, and seemed to folowe the counsell of Cato and Columella, with whom agreeth also Plinie, that the owner build his house in good order, so as neither the house be to great for the lande, nor the lande to muche for the house. And herein it is written, that L. Lucullus, and Qu. Scæuola were both to blame: for one of them had a greater house then was answearable to his liuing: the other, which was Scæuola, built a smaller house then his liuyng required, where both are vnprofitable to the maister: For the great ruinous house, not onely is more chargeable in buildyng, but also aketh greater cost in the maintayning. Againe, if the house be to litle, it wyl be a destruction and losse of your Corne & fruite: therefore is it greatly to purpose, in what sort we build and ordeyne our house. Cato would haue the house so seated, as the ayre be good about it, and (yf it may be) placed at the bottome of a hill, looking directly South, and in a holsome corner. Varros mind is, to haue it placed towarde the East, that it may haue the shadowe The order of building of a house for the Countrey. The seate of a house.

dowe in Sommer, and the Sunne in Winter: with whom Columella agreeth, saying, that yf habilitie serue, the seate is to be wyshed in a hollsome place (for Cato as shal hereafter be shewed, would haue healthy standing cheefely regarded) with a fruitefull moulde, some part of it champion, some hilly, lying East or South, well watred and woodded, and standing not farre of from some hauen, or nauigable riuer, to the end he may cary and transport such thinges as him listeth. Cornelius Tacitus writeth, that the Germanes were woont to build their houses, as the Hyll, the Riuer, the Wood, or the Lake, would best suffer them.

RIGO. Hereof I thinke sprang at the fyrst so many surnames as are at this day deriued from Mountaynes, Riuers, Lakes, and Woodes.

CONO. It may be, yet others doo counsayle, in no case to set your house neere a Marshe, or a great Riuer: for the Fennes and Marshes in the heate of the yeere, doo send foorth pestilent and deadly dampes, and a great number of venemous Creatures: which dying, for lacke of their olde moystoure, infecteth the ayre, and breedeth sundry and strange diseases. Homer affyrmeth very truely, that the ayre whiche in the mornyng commeth from the Riuer, is very vnhollsome and daungerous: and therefore yf the house must needes be built neere a Riuer, they would haue suche heede taken, as the Riuer rather stande on the backside of the house, then before it: and that the frunt of the house be turned from the hurtfull and vnhollsome wyndes, and placed towardes the healthiest quarters. Sins all waters commonly with dampishe vapours in Sommer, and stincking colde mystes in Winter, except they be well purged with hollsome Windes, doo infect both man and beast with pestilence: best is it therefore in good and healthy places, to set the house toward the East, or the South, and in suspected ayres to place them agaynst the North. From the Sea it is good to be as farre as may be, because the windes that blowe from the Sea, are vnhollsome, and the space lying betwirt you and it, yeeldes alwayes a lothsome ayre. You must beware besides, that you set not your house by any great hie way, least you be molested with passingers, and troubled often tymes with more ghestes then you would haue.

RIGO.

RIGO. As farre as I remember, the olde felowes dyd measure the goodnelle of their dwelling, by the qualities of their neyghbours. Neighbourhood.

CONO. You say very well, in deede I had almost forgotten it, a frowarde knaue to a mans neyghbour, is not one of the least mischiefes, as shalbe sayde in the end of this booke. I haue knowen sundry good men desyrous of quietnesse, that haue forsaken good dwellinges, rather then they would abyde the iniuries and troubles of suche companions: wherfore Hesiodus had some reason in saying, Πῆμα κακὸς γειτὼν ὅσσον τ' ἀγαθὸς μέγ' ὄνησι.

As great a mischeefe is a frovvard knaue,
As is the ioy a neighbour good to haue.

But you maruayle what I meane by suche a long preamble, surely I am the longer in this matter, because you should vnderstand the reason of building of my house. For whereas there are sundry purposes of building, and some build for pleasure, some for wantonnesse, and some for necessitie, I thought it good to resyte the mindes of the olde writers, concerning the building of a house. And when as euerie one will not suffer suche curiositie as they require in ỳ placing of a house, some building vpon Riuers, some without or within the Marshe walles, who can not shunne the neighbourhood of the Riuer or the Sea, some in Lakes, some in Woodddes, and some building vpon mountaynes, are driuen to supply the defect of nature with arte & industrie, I mee selfe syth I can by no meanes auoyde the neerenesse of the Riuer, do seeke as much as in mee lyes, to turne away the discomodities: and because I feele the discomoditie of the rysing of the flooddes, I haue set my house in this place without the bankes, and mounted it as hie as I could: and least the rage of the water, and force of the yce should beare it away, I haue planted round about it great trees: and that I might shun the dampes of the ground, and the blastes of vnholsome windes, I haue turned my doores and my windowes to the holsomest quarters.

RIGO. Surely, eyther you, or your auncestours haue both commodiously & handsomely placed this house, for ỳ front is double, one part looking towards ỳ East, the other towards the South,

and so built with Galeries and Gables, as it both receiueth the Sunne in Winter, and the shadowe in Sommer: besides, you haue a fayre Porche as you enter in, that keepeth away the wind and the rayne from the doore.

CONO. All the one side, if you marke it, where the front is, lyeth South, receyuyng from the fyrst corner, the rising of the Sunne in Winter, declining somewhat from the West, wherby it is warme in Winter, and not troubled with ouer great heate in Sommer: for this kinde of building hath an equall medlie of the Winter windes and Sommer windes, so that it receiueth the coole windes in Sommer, and is not subiect to the bitter blastes in Winter, though there be something in it that might be amended, and that dooth not well please me.

RIGO. Some part of the building, mee thinketh, is after the Italian maner.

CONO. Some part of it, being ruinous, I built after my fancie, and suche as I found sounde, I thought yenough for me to keepe the reparations.

RIGO. I pray you proceede with the describing of the rest. This base court seemeth also to me to be after the Italian fashion with two gates.

CONO. This Court I thus deuised mee selfe. Here was a kinde of Court before, but not so commodious: therefore I made a square wall here with a great gate, for the bringing in of my cariages, and a lesser for people to passe in and out. In the voyde place here besides the porche, I haue made a litle walke, couered with a Vine, with diuers seates in it for shadowe, where I many times walke and talke with suche suters as I haue: I haue in it a table of stone to suppe vpon when I am disposed. Ouer against the gate, as you see, at the South side of the Court, there is a Backhouse, and a Cornemill, with Ouens for bread, and other baked meates, there is also a Brewehouse with an Oast for drying of Malt to make Beere with.

RIGO. Surely all very handsome, and in very good order.

CONO. These offices (for feare of fyre) you see, are all seuered from the house: there is hereunto adioyning a very fayre well, which besides the seruice heere, dooth also serue my Kitchin, and

other

eyther houses of office: for within the house, I haue neyther well nor fountayne, which is a great discommoditie, suche as I would geue a great deale of money to remedie, both for health & coolenesse in Sommer, and for watring my Gardens and my Orchardes. Water is one of the principalest things to be cared for, as the greatest cause of health both in man & beast: but this want is supplied partly by a good well without, & partly by Sesternes receauing the rayne water that falles in certayne Conduites and pipes, which water is most holsome for the body: and beside, the Riuer is not farre of.

RIGO. Come on I pray you, let vs see this Backhouse, I heare that you haue a newe and a strange fashioned Mill of your owne deuise?

CONO. You shall see it. When as in a great house, there is great neede of Corne Mylles, and the common Milles, being farre of, the way foule, and I at myne owne libertie to grinde at home, or where I lyst, thinking to make a mill here at home, when neyther place nor auctoritie wyll serue me to builde eyther a water mill or a wind mill, and a querne, or a hand mill, dooth but a litle good: and to build a horse mill were more troublesome. When I sawe the wheeles that they vse to draw water with, turned with Asses or men, I thought in the like sort the wheele of a mill myght be turned, and after this sort deuised I this engine, whiche a couple of Asses, guided by a boy, doo easilye turne, and make very fine meale, sufficient for myne owne house, and most times for my neighbours, whom I suffer to grinde tolle free.

RIGO. Surely I like well your deuise. What wyll not the diligence of man bring to passe?

CONO. I fynde it profitable vnto me, but because it is not the speediest way of grinding, I haue beside a horse mill, whiche yf neede require, is turned about with a Jade or two.

RIGO. Lo here is a great leade placed handsomely in a Bricke furnace in the corner, whiche I thinke serueth to brewe withall.

CONO. In deede to that ende is it most occupied, but it serueth other turnes beside.

RIGO. There is a Hopper (mee thinketh) ouer the toppe of the

Malt, whereto serueth it?

CONO. It serueth to conuey downe the Malt, after it is watred vnto the heare cloth, where it is dryed.

RIGO. Wherefore serueth that great Tonne?

CONO. To water the Barly in when neede is, otherwyse it serueth for a Malkatte. Hereby is a Backhouse and a Pastrie with two Ouens, one seruing for household bread, the other for manchet for myne owne table, and for Tartes and fine baake meates. Here are also troughes to keepe meale in, and troughes to lay leauen in, and there is a fayre table to mould vpon.

RIGO. All is handsome: but what meanes this building about your Court?

CONO. These buildinges seuered from the rest, doo serue for ghestes chambers, with a chamber for my hotte house: this syde you see lyeth agaynst the settyng of the sunne in Sommer, where the sunne may lye from noone tyll nyght.

RIGO. But that litle Ile moated about, and seuered from the court with a Bridge, seemeth to be more gorgeously and sumptuously built, I take it to be your owne lodging, where you, your wyfe, and your seruantes meane to lye safely.

CONO. It is euen so, and therefore it is built vpon a higher ground, both for the safegard of the fundation, and for the better ayre & fayrer prospect: beside, my Garden and my Orchard are adioyning to it, whiche with the sweete smell of the floures, and the fayre beautie of the trees, bringeth both health and pleasure. The wyndowes for the most part open al East, and some of them North, very fewe West, except from suche Chambers or Galleries Southward, where I dyne and suppe, to receiue the sunne in Winter abundantly, and in Sommer very litle: the Tower that you see serueth for my Douehouse.

RIGO. The great flyghtes of this house must needes fyll the maisters purse, and serue the Kitchin well.

CONO. In deede, yf as that noble and passing well learned Varro affyrmeth, they might be solde as in some ages they haue been at eyght pound a payre, or that a man might meete with suche fooles, as Columella writeth of, that haue geuen 40. pound for a payre, I graunt I coulde make a good handsome gayne of them,

them, but as they be, they hardly ſerue myne owne table.

RIGO. What dooth not the madde deſyre of delicaſte procure? euen in our dayes of late I haue heard, there was threeſcore Florens geuen for a payre.

CONO. I wyl keepe you no longer here about mine owne lodging, you haue ſeene a great number of better houſes, and paraduenture had rather ouer looke my outhouſes.

RIGO. I had ſo in deede, you haue, I ſee, deuided your houſe into three partes.

CONO. So I thought it beſt, one for mee ſelfe, an other for my huſbandmen, and the thirde for graine and fruite.

RIGO. What meaneth this Cell here ſo handſomely built at the entrance?

CONO. This is for, my Bayliffes lodging, I lay him by the Gate, that he may ſee who goeth in and out, and what is brought and goeth forth, from thence he may alſo looke into the Kitchin, and ſee and heare what is there doone: for beſide the meate that is dreſſed, there are other thinges doone there in the Winter morninges. Ouer my Gate I haue laide my Steward, from whence he may looke into the Court, and to the Gate, and ouerſee his neighbour the Bayly.

RIGO. Mary ſyr here is watche and warde in deede, this I thinke you learned of Varro, for it is a part of his order.

CONO. Thus experience teacheth. Hereby is my ſtorehouſe.

RIGO. Mercifull God, what a ſort of tooles haue you here?

CONO. Heſiodus would haue a huſbande haue all his furniture redy, and wyll not haue him borowe in any caſe.

μὴ σὺ μὲν αἰτῆς ἄλλον, ὃς δ' ἀρνῆται σὺ δὲ πτᾶ.
Ἡδὺ δ' ὄρη παρεμεῖβεται, μινύθησί τοι ἔργον.

Of others borovve not, leſt they refuſe to lend,
So thou ſhalt vvant, the tyme ſhall paſſe, and buſineſſe neuer end.

Therefore I haue ſo furniſhed my Bailiffe, as he hath of euery ſort two. Marcus Varro deuideth his huſbandry neceſſaries into three partes: vowels, where he puts his owne ſeruantes, & ſuche as he hyreth: halfe vowels, where his woorking cattell be: and mutes, be theſe that you ſee, whereof the ſmaller ſort be theſe,

Ares, Hatchettes, and Sithes, of all sortes, Corne Sithes, Grasse Sithes, Stubble Sithes, Handbils, Sickles, Knives, Pealehookes, Spades, Shouels, Wedges, Dragghookes, great Sawes, lesser Sawes, Handsawes, Timbersawes, Pitchforkes, Iron hookes, Iron forkes, Twybilles, Dung forkes, Tonges, Sheares, Sylars, Mattockes, Fyles, Cleauers, Claspes, Lancets, Stringes, Cutting knives, Gelding tooles, Clipping sheares, Leauers, Pesles, Rulers, Garden Rakes, Hammers, Chippe Ares, Winches, Pulleys, Wheeles, Rakes, single and double, Yokes, Collers, Bridle reynes, Headstalles, Halters, Traaces, Cordes, Haames, Baskets, Fannes, Whippes, Flaels, Strikes, Spoakes, Drawyng knives, Sacks, Wallets, Bottels, Weede hookes, Brakes, Hempe betelles, Distaues, Spindelles, Wharles, Fyreshouels, Fyrestones, Gredirons, Handbarowes, Dung Cartes, Wheelebarowes, Maundes, Hampers, Ropes, and Line, of all sortes. The sortes and partes of Plowes and Waynes, I wyll shewe you when we come into the court next the Heybarne. Hogsheds, Tonnes, and Uessels, for Wine, Beere, and Water, Pipes, Tonnels, and suche like, shall likewyse be shewed you, when you come to the Brewhouse, and Windseller. With Colerakes, Siues, Sercers, Boulting tubbes, Boultars, that you shall see in the Backhouse, and instrumentes for all other purposes, layd vp euery one in his place, till they be to be occupied: for it is very necessarie to haue of euery sort two, as the number of your seruantes and necessitie requires: that yf one be lost or broken, you be not driuen to goe a borowyng, or to leaue your worke, wherby your men shalbe idle, whyle your tooles be a seeking. For to runne euery day to the Towne to get newe, is not for a husbands profite. Beside, in the meane time your seruantes loyter, and lose more then the value of their tooles.

RIGO. Truely they be all placed in good order.

CONO. I place fyrst by them selues, suche as are most in vse, that they may be the redier, and next to them, suche as be occupied once in a moneth, or in a yeere: I geue the keeping of them al by tale, to my steward or my bayliffe, that they may deliuer them out as nede is, and lay them vp againe, and charge them in any

case

ese to looke to them euery moneth, that they may mend what is amisse in them.

RIGO. Order is a iolly felowe, and no goodlier a thing in a man, then to doo euery thing orderly, and to lay vp euery thing in such order, as it may redily be found, of which a singuler example dooth Iscomachus shewe in Xenophon, in his Phenician barke, wherein a woonder it is to see what a deale of stuffe he hath bestowed in so small a vessell: he caried with him all the furniture that a man should neede, and euery thing in such order placed, as they were at hand when neede was, without any trouble.

CONO. I mee selfe haue an inuentorie of all my husbandry implementes, and so hath my Bayly and his Wyfe, my steward hath the key of the storehouse, and deliuers out, and receaues as I tolde you, what euery man needes: for I wyllyngly neither borowe nor lend: I haue a neighbour or twayne, of whom sometime I borowe, and lend agayne: but except them, to none as Cato teacheth me.

RIGO. The same Cato also as I remember, teacheth to know a mans husbandry by his tooles, therfore by your great number of tooles, a man may gesse you haue a great deale of occupying.

CONO. The double number of them makes the muster the greater: otherwyse, yf they were but to serue the turne, they would not seeme so many.

RIGO. I pray you goe forward with your description.

CONO. You see a voyd roome before the Kitchin, whiche is an entrie both to the Kitchin, to the folkes Chamber, and to the Orhouses, which ought to be neere togeather, yf any misfortune shoulde happen to the cattell in the night, that my men might speedely helpe them.

RIGO. The Kitching is very well handled, in that you haue so well pargetted the roofe. The Kitchin.

CONO. It is because I haue a great number of seruantes, whiche for lacke of other roome, doo dine and supper here: beside, the pargetting or seeling, is a good safetie against fyre.

RIGO. Here is a good handsome roofe by the Chimney, well stored with redde Hearing, Bacon, and Martilmas beefe, there is also a handsome sincke by the Kitchin.

CONO. This lettised wall that you see, ioyneth to my Bayliffes chamber, so that he may see what is doone in the Kitchin, and about the house. Hereunto is also ioyned my Larder, a vault with three roomes, one seruing for Butter and Milke, the other for Beere and Wine, the third to keepe flesh in: here haue I no wyndowes to the South, nor to the West, but all to the North, and to the East, because these quarters are least subiect to corruption, and wyll longest preserue any thing. Aboue in the loft yonder, doo I lay my corne vpon a fayre floore, closely fenced and seeled against Hise, receauing the light by lattisse windowes from the North. Harde by, is an other loft very close, with like windowes towarde the North, seruing for my fruite: for that quarter is colde, and not moist, whereby it preserues best, both Meate, Corne, and fruite. Nowe yf you wyll goe through this doore, you may beholde the backside of my house: loe here a fayre threashing floore, whereupon my Corne is sundry times threashed, fanned, and winnowed, and many other thinges doone, cheefely in the Winter mornynges, though I haue beside a threashing place in my barne. On eache side, are lodginges for my seruantes, and other roomes and lofts for strawe and fodder for my cattell: and there by the stables, are also seruantes lodginges on euery side, and my maides chamber neere the Kitchin, and the washing house. You see this forestall closed round about, to the end that the cattel, when they be watred and put forth, while their houses be made cleane, may be in safetie. And here I keepe also Geese, Duckes, Peacocks, Turkicockes, and other poultry. It is as you see, so enclosed with stables, barnes, and other houses, that nothing can get out. Varro wyll in any case haue two courtes, an inner court with a litle pond in it of standing water, or running water, in maner of a Fishepond, and there he would haue Horse and Oxen, comming from the Feelde, or stable, to be watred and washed, and to serue likewyse for Sheepe, Swyne, and Geese. In the vtter court would he haue a Lake to cast in wheeles, staues, and peeces of timber, for instrumentes of husbandry, that they might there be seasoned. This court he woulde haue often strawed with strawe, and Chaffe, that being trampled with cattell, it may serue to laye vpon the grounde.

Larder.

Corneloft.

Appleloft.

You

You see in this court a double dounghil, one of them newly thrown out of the stables, an other olde one seruing for the Feelde: for new doung is nothing so good as the olde, for manuring of the ground.

RIGO. What meanes these twigges, bowes, and strawes, cast vpon the doung?

CONO. This preserues the doung, that the iuyce that ỳ ground requires, be not sucked out of the sunne: and hyther also runnes the water from the Laundry to moist it the better. Varro woulde haue here also a lodging for seruantes. But lest we tarry to long among the dounghilles, let vs goe see the other buildinges about the Court. These great roomes that you see, be Barnes to laye Barnes. Corne in. In some places they vse houses, in others agayne, stackes set vpon proppes, which they call mowes: but the houses are a great deale better. Next to the Barnes, are the stables, stan- Stables. ding arowe round about the Court. And because Virgil woulde haue the stable stande towarde the south, and Vitruuius, neere the fyre, I haue folowed their order in building my stables. And first haue I set here my stable for my Cart horse. I haue an other stable neere myne owne lodging, for my Horses of seruice, and Hackneyes.

RIGO. That seemeth to be very handsomely built.

CONO. The next are houses for my sheepe, and next them for Kine, Calues, & Heyfers. There is a Hogstie with two roomes, one for my farrowyng sowes, the other for Hogges and Boores. There is also a thirde stie, not farre from the washouse, for the fatting of my Porkes: euery kinde hath their keepers lying neere them, that they may be at hand whatsoeuer chaunceth. Last of all there stands my Heybarne, which hath in the vpper roomes my Hey, and beneath, Waynes, Cartes, Carres, Waggons, Coaches, Harrowes, Sledes, Plowes, Rowlers, Wheeles, Naues, Cartshooes, Yokes, Rakes, Plowbeames, and suche other like, which are there safe from wet, and from pilferers.

RIGO. I pray you who dooth looke to all this geare, and keepeth euery man to his worke?

CONO. My Bayliffe, as I tolde you before, ouerseeth both my worke and my workemen: besides, I haue a Steward

that

that looketh to the receauing of my reuenues and commodities.

RIGO. Your Bayliffe had neede to be a skilfull and a trustie man.

CONO. You say true, for as Xenophon sayth, the choyse of a Bayliffe and a Phisition ought to be one: you must choose suche a one, as being a very expert husbandman, may well be able to take the charge, and not to be ignorant of those things him selfe, that he commaundeth others to doo: for nothing is well taught or learned, without example. For as Cato sayth of a husbande of the olde stampe, it goeth ill with that maister whom the Bayliffe must teache. As Iscomachus being demaunded of Socrates, whether he would buye a Bayly, as he woulde hire a Smith, or rather teache him him selfe at home: He answeared, he would haue him of his owne teaching.

The choyse of a Bayliffe of husbandry.

RIGO. But this is after the olde world, wherein no man was vnskilfull: but it is a woonder, how you that haue alwayes been brought vp in Princes affayres, could in these dayes (when very fewe, except Plowmen, and such as haue no other trade of lyfe, haue any skill in it) apply your mind so vnto it, as a man would thinke you had neuer minded any other profession.

CONO. Surely I thinke he shall neuer haue a good Bayly, that is not able him selfe to iudge skilfully of him: nor let hym euer thinke to haue his woorke wel doone, that knoweth not how nor which way thinges ought to be doone, but must be faine to learne of his man: for there is none can iudge of a woorke but a woorkeman. Therefore in the choyse of a Bayliffe, I woulde haue foure thinges cheefely considered: that he be louing, diligent, meete to rule, and trustie: and yf you wyll adde a fyft, I am well contented, that is, that he be not geuen to drunkennesse: for a drunkenman looseth with his memorie the regarde of his duetie. I doo not enquire whether he haue been brought vp ciuilly or deyntely, but I woulde haue him a hard fellowe, brought vp from his childehood to labour, and one that were throughly well skilled, of a meane age, that he be not vnwylling to woorke for youth, nor vnable to trauayle for age. I woulde haue him haue some skil in Carpentrie, that if there happened to be any thing broken about his Stables, his Cartes, or any other

What thinges ought to be in a Bayliffe of husbandry.

his

his instrumentes, he might speedely mend them, and that he coulde mend Walles and Hedges. I woulde haue him also not vnskilful in ỳ diseases of cattell: such a one as hath been brought vp with skilful husbandes, wyll proue meetest to haue charge. For there be a great number, that though they be skilfull ynough in their profession, yet haue they not gouernment in them: but eyther bring to much sharpnesse, or to muche gentlenesse towardes suche as be vnder them, doo hinder the profite of their maister, and therefore I woulde haue a Bayliffe well tryed before he be taken: neither is it onely to be sought, whether he be skilfull in this craft, but whether he be trustie and louing to his maister, without whiche, he is not worth a rushe, though his skill be neuer so great. And cheefely, he must be skilfull in this, to know what worke is meetest for euery man: for some woorkes require strength more then skill, and others, otherwyse. And therefore in appointing of these, he ought to haue great iudgement and good discretion, which he can not haue, except he haue good skill. Therefore a Bayliffe is as well to be taught as a Smith, or a Carpenter: and the knowledge of husbandry is greater and of more difficultie. Wherefore I marueyle, that in this so necessarie an occupation, there are found so fewe maisters and prentices.

RIGO. Perhaps the tediousnesse and hardnesse thereof driueth them away.

CONO. Why haue not Orators been likewyse driuen away, for hitherto as Cicero sayth, there hath been no perfect Orator found.

RIGO. Of whom would you haue your Bayliffe to be taught?

CONO. Your question is good, I wyll shewe you, though very few haue taught what belongeth to a husband in all things, neither shall you finde many skilfull in euery point. Therefore he that shall be a Baylie, must be taught by degrees, he must fyrst begin when he is a childe, with keeping of Sheepe or Swyne, and when he is elder, with droues of cattell, and keeping of horse: he must learne next to digge, to threashe, to set, to sowe, to hedge, to build, to mend such thinges as are broken, to play the butcher, to geue drinkes and medicines to sicke cattell, and such other like thinges. The trayning of a Bayliffe.

thinges. And thus must he proceede from one to an other, tyll hauing passed them all, he come to be a maister, euen as Gregory Nazianzen teacheth of a Byshop, and as Tully would haue a generall, after he hath borne all other offices of the feelde.

RIGO. You shewe me woonderfull Philosophie.

CONO. As I saide at the fyrst, his best age is betwixt thirtie and threescore: for the flames of lustie youth beginning to abate, he wyll not be so hotte in his wooing: for whyle he folowes that game, he wyll haue no minde but of his minion, neither shal any reward be so welcome vnto him, as the fruite of his fancie, nor any greefe so great to him, as the fayling of his desire. If he once passe threescore, he wareth slouthfull and vnable to labour. For I had rather haue the woorke of a painefull and diligent Bayliffe, then the seruice of a great number of slouthful lubbers: as he that had rather haue a Lion captaine ouer Hartes, then a Hart captaine ouer Lions. This must cheefely be looked vnto (sins early going to woorke is a great matter) that the Bailiffe be a good riser, and that, supplying his maisters place, he may be the fyrst vp in the morning, and the last that goeth to bedde, and that he see the doores fast locked, and euery man in bedde, that the cattel haue meate ynough, and be well littured, that he set forward, according to the time of the yeere, suche as doo loyter in their labour, that he him selfe goe lustely before, that he suffer no man after it is day to lagge behinde, but that they folowe the Bayliffe lustely with a courage, as yf he were their captaine in a skirmishe: and that he vse sundry deuises to cheare them vp in their labour, sometime as it were to helpe him that fainteth, to take his toole out of his hand, and labour lustely before him. And as a carefull shepheard earlie carying out his sheepe, and bringyng them home late, looketh that he leaue none of his flocke behinde him: so likewyse ought a good Bailiffe to carrie out his men, and to haue good regard ouer them. If any of them happen to be hurt or sicke, let him looke to the dressing of them, and yf they be very sicke, to carrie them to the sicke folkes lodging, and to see that they be well ordered: and to that vse haue I built yonder house that you see, remooued from the other buildinges, that the sicke may be had thyther and looked vnto, specially yf their di-

seases

ſeaſes be contagious, leſt other ſhould be infected. It is the maiſters duetie to haue ſuch regarde of the health of his ſeruauntes, and to haue ſuch care of them, that their ſickneſſe may be preuented by good medicines and good looking to: as to ſee that theyr meate and drinke be wholſome and good, and geuen in due ſeaſon: beſide, that the Baſliffe eate his meate with them, and not by him ſelfe, whereby it ſhalbe the better ordered. And becauſe Phiſitians are not alwayes at hand in the Countrey, it behoueth to vſe ſuch remedies as experience hath taught, and ſuch as haue holpen others of like diſeaſes. Thoſe that labour in the Sunne (becauſe the Sunne hurteth the body and the vaynes) theyr diet muſt be the thinner, that they make not to great meales, but eate litle and often: this order keepeth them in health, and helpeth digeſtion. Some doo vſe to geue Woormewood wine, or potage made of Woormewood. It is very neceſſarie for them ſometimes to recreate them ſelues, ſo that in the meane whyle they geue not them ſelues to noughtineſſe. There muſt be heede taken, that they drinke not when they be hotte, nor lye vppon the colde ground: yf their water be not good, it muſt be wel purified. It is very good alſo to let them drinke Barly water. We muſt remember that ſeruantes be men: beſides, ſuch good looking to, wyll breede a greater good wyll and duetie, and lightly they wyl ſerue the faythfuller and better when they haue their health, whiche haue had good cheriſhing in their ſickneſſe: and beſides (which is not ſo well obſerued in greater gouernours) the Bayliffe muſt beware that he deale not to cruelly, nor to gently with them, that he alwayes make much of thoſe that be diligent and paineſull, that he be not to haſtie with the wooyſer ſort, that they may rather reuerence him for his ſeueritie, then hate him for his crueltie, whiche he ſhall eaſely bring to paſſe, yf he rather beware that they offende not, then after their offence to late to puniſhe them. For there is none ſo good a bridle for an euil diſpoſed perſon, as to let him alwayes be occupied. So that Catoes ſaying herein is moſt true, that men in dooing nothing, learne to doo euyll. Let them haue their allowance and their meate in due ſeaſon, let them alwayes feede togeather in one place, and the Bayliffe with them, that he may be an example to them of all thrifti-

neſſe.

nesse. If he finde any of them to haue laboured painefully and truely, let him geue them a good countenance, & encourage them with rewardes, to make them the wyllinger to doo their duetie: beside, let him looke that they be rather well clothed, then curiously apparelled, that their garmentes may keepe them from the colde and the rayne: let their wages be well paide them, that the want thereof be no excuse for them to loyter in their labour. And as meate and apparell is necessarie for them, so likewyse is correction. For the wyse man sayth, Geue a Horse the whip, an Asse the snaffell, and a Foole the rodde. And agayne, He that deales to gently with his seruauntes, shal make them in the ende stubborne and froward. Aboue all thinges let hym see that they feare God, let him in no wyse suffer them to sweare or to blaspheme, nor to vse filthy or vngodly speache: but let him prouide that they be instructed in the Catechisme, that they vse prayer, that they go to Sermons vpon the holy dayes, and receaue the Sacraments at times appoynted, that they be not hunters of Alehouses or euill company. For as the Poet sayth, It is lawfull to be well occupied, euen on the Festiuall dayes. When they haue serued GOD, and dyned, let them walke abrode in the ground, let them looke there be no cattell in the Corne, and stoppe suche Gappes as they fynde open, and looke that their cattell be in safetie abrode. To be short, the Bayliffe must in all these matters be as it were a Byshop, or a maister of the woorkes, so shall euery man the better doo the woorke that belongeth vnto him. The Bailyffe must neuer be from their heeles, least in his absence they fall to loytering, neither must he suffer them any time to be idel: he hym selfe must not be geuen to drinking or gaming, nor to huntyng or fyshing, except for his maisters profyte: let him very seeldome entertayne any ghestes, except they be of his maisters retinewe: let him not bestowe his maisters money about his owne marchandize, for such kinde of bargainyng makes him the slacker in his duetie, and maketh his accomptes seeldome fall out iust. Aboue all thinges this is to be wisshed in the Bayliffe, that he doo not thinke hym selfe wyser then his maister, or suppose him selfe to haue more skill then he hath, and that he alwayes seeke to learne suche thinges as he is ignorant of. For as it is very profi-

table

table to doo any thing skilfully, so is it more hurtfull to doo it vntowardly. Columella had rather haue a Bailiffe that could neither reade nor write, so that his memorie be good: for such a Bailiffe (sayth he) wyll oftner bring his maister money, then a booke: because (not able to wryte) he can not so easely frame a false accompt. The Bailiffes wyfe must alwayes be with him, that she may keepe him from running at rouers, and may helpe him in his labours: her age must be such also, as we required in the Bailiffe before, she must be painefull, healthy, carefull, and honest, she must not be to ylfauoured, lest she be lothsome vnto him, nor to beautifull, least he doate to muche vppon her, and keepe home when he shoulde be abrode. She must in the meane time looke to the Kitchin, and to other woorkes at home, gouerne the maides, and keepe them at their woorke, looke to their necessaries, and geue them their allowance. The Bayliffes wyfe.

RIGO. You seeme to me here, to make the Bailiffe a maister, and the maister a Bailiffe.

CONO. This age of ours, quite corrupted with delicacie and deyntinesse, litle regardeth the honest and profitable orders of our forefathers: for in those dayes the maisters themselues plaide the husbandes, and thought it not to goe well with that maister that must be taught by his Bailiffe, as Cato witnesseth, and Varro also complaineth, that the husbandes in his dayes had forsaken the Plowe and the Sithe, and gotten themselues within the walles, and spent their time rather in Maygames and Midsommer sightes, then with tylling the ground, or planting of Uines. Therefore Cato and the olde wryters doo attribute many thinges to the maister, that we assigne to the Bailiffe. And I, though I seeme to put the charge of the houshold in the handes of my Bailiffe, yet wyll I mee selfe be ouerseer, and haue euery thing doone as I appoynt, entreating gently (as I taught the Bailiffe afore) both the Bailiffe and my labourers, regardyng more their labour then my gaynes. But I carrie you about to long, being fasting, I pray you let vs goe to dinner: you shall not dyne at the Court to day, neither meant I to shew you, as you see, the pallace of Lucullus, but the poore cottage of Cincinatus, Abdolominus, or Laertes. Here you see the roomes for my husbandmen,

seuered

seuered from myne owne house, but yet so, as I may easely see whatsoeuer they doo. Here I and my wyfe with our household seruantes doo lye.

RIGO. All very excellently well as may be, there is nothing wanting that is to be wished for. Maistresse METELLA, you trouble your selfe to muche, like Martha, about the prouiding of your dinner.

METELLA. Not a whit syr, you must be contented with Countrey fare, you shall neither haue redde Deere, Marchpane, nor Sturgian, nor any Courtiers fare: but an Egge, and a Sallet, a Pullet, or a peece of Lambe.

RIGO. This diete contenteth me aboue all other.

CONO. Fal to it then, & tel me how you like our countrey wine.

RIGO. Surely it passeth eyther wine of Orleans, or Aniow. I did not thinke to haue founde so good a cuppe of wine in these quarters.

CONO. The husbandry, and good season of the yere doth yeeld the same.

RIGO. Well, we sit to long at dinner. The weather being so fayre and so pleasant abrode, it is shame to sitte any longer, but to walke out and looke vpon your ground.

CONO. The weather being faire, you bring a Horse to the Feelde (as they say) when you speake to me of going abrode: for I mee selfe, yf the weather or businesse doo not let me, am euery day, according to Catoes counsell, abrode in my ground: and yf it please you, I wyll carie you abrode and shewe you my grounde. You must not looke to see the great Countreys of Metellus or Lucullus, but the possessions of a poore Countrey man, that contented with his state, would be as he is, and would not change liues with the Emperour.

Of the tylling and husbanding of the ground.

RIGO. I pray you let me here your opinion of the Feeld, and the tilture thereof: for I see you are a perfect husbande, and nothing vnskilfull. I haue a great desyre to heare some rules, and such as serue our turne best.

CONO. If it be a shame for an apprentice at the lawe, and a pleadar of causes to be ignorant of the lawe wherein he dealeth, a greater shame is it for a professor of husbandry, to be vnskilful

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in the ground whereon his whole trade lyeth. Howe is he able to iudge vprightly in huſbandry, that knoweth not whiche way to tyll his lande? The profeſſours of all other artes, do commonly keepe to them ſelues, ſuche thinges as be the chiefe myſteries of their knowledge. Contrariwyſe, the huſband reioyceth to haue euery body made priuie to his ſkill, & being demaunded in what ſort he dooth this and that, he gladly declareth his whole dealing in euery poynt: ſuche good natured men dooth this knowledge make. I haue ordered my ground here, according to the diligence of the olde fathers, rather then for the wantonneſſe of theſe times. Therefore I wyl firſt ſhewe you their opinions, and afterwards myne owne fancie. Firſt, Cato appointeth niene degrees of the land in Italie. The firſt, the Vineyard, that yeeldeth muche and good wine: the next, the well watred Garden: the thirde, the Wyllowe Groue: the fourth, for Oliue trees: the fifth, for Meddowe: the ſixth, Corne ground: the ſeuenth, for Coppie grounde: the eyght, for Timber trees: the laſt, for Maſt. But theſe degrees as Varro ſaith, are not generally allowed of, neither haue we the vſe of them all in theſe Countreys: but make moſt accompt of ſuch land, as ſerueth for Garden or Orchard grounde, Corne, or Fiſhpondes. Of Corne ground I wyll firſt entreate, and afterwardes of Paſture, Meddowe, Wood Lande, and Wyllowe Groues.

The good nature of the huſbandman.

The degrees and ſortes of ground.

RIGO. I pray you then take the paines to ſhewe the nature of it, and which way the beſt ground may be knowen.

Of Corne ground.

CONO. Cato counteth that the beſt grounde, that lyeth at the foote of a mountayne, being leuell and lying toward the Sunne, as the whole Countrey of Italie lyeth. In colde and Northerlye Countreys, it is good to haue the lande lying Eaſt and South, leaſt theſe two quarters, being bard of by any hil, the land be frozen with colde: but in hotte Countreyes it is better to haue the ground lye North, both for pleaſure and health.

RIGO. They ſay it is needeful to knowe the conditions of euery ground.

CONO. It is ſo. and ſooner ſhall you doo it, then the conditions of a man: for being well tylled, it wyll not deceaue you, but deale iuſtly with you. To knowe the nature of euery grounde,

Howve to knowve the goodnes of the grounde.

Iscomachus in Xenophon, dooth wyll you to marke wel the plantes and the yeeld of the Countrey, except you wyll loose your labour or fyght with God. Varro counsels you to looke whether there be in the land eyther Stone, Marble, Sande, Grauell, Raddell, Chalke, Claye, Pzeble, or Carbuncle, that is ground ouer heated and parched with the Sunne, whiche wyll burne the rootes of what so euer commeth in it. Also yf it be wette or weeppyng ground, or subiect vnto other inconueniences, and suche grounde also, according to the nature of the soyle, is good or cupl. In some Countreys stonie grounde is altogeather barren, specially for Corne and Fruite. In other places agayne, they vse stones in the manuring and bettring of their lande, as in certayne places of Arden is to be seene. Theophrastus wryteth, that the Corynths dyd cast away all the stones out of the Feeldes of Sarragosa, and thereby made the ground the woorse, when, the stones being away and the Countrey hot, there was no succour left to defend the ground from the extreame heate of the Sunne. In other places in stonie and hilly groundes Otes doo prosper well. In lyke sort, in all Countreys we must regarde the layre of the Countrey, and the nature of the seede that we sowe: for Grauell in some places is cast vppon the ground in steade of doung, and some thinges prosper best in grauelie groundes. In Barbarie (as Columella dooth witnesse) the very rotten sandes exceede any other grounde in fruitefulnesse. It is also something to the purpose, whether the grauell be white, redde, or yellowe: besides, some grounde dooth deceaue both with colour and qualitie. In some Countreys the blacke mould is onely esteemed: in others, the fat redde mould is thought best. In Englande, the chalkie grounde beareth good corne, and pastures very well. In some places the thicke and the clammie ground is most fruitefull. In al these it is to be learned, what is best for the hill ground, what for the valley, what for the tylled, what for the leye grounde, what the moyst seggie grounde requires, and what the dyrye and barraine. Also in planting, what ground is best for Vines, what for other trees, what delightes in dyrie ground, what in moyst ground. Virgil commendeth a mellowe ground that is fatte, and wyll soone be resolued, for such ground is tylled with smalest charge and labour: the nexte, is that whiche

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is fatte and ſtiffe, which greatly recompenceth the huſbandes trauaile and charges: the wooꝛſt, is that which is dꝛy, leane, and ſtiffe: foꝛ both it is tylled with great labour, and beſide, neither anſweareth in his croppe the huſbandes trauayle, neither ſerueth it foꝛ good meddowe oꝛ paſture any time after, and therfoꝛe ſuch ground is not to be medled withall. Alſo, the goodneſſe of the ground is eaſely perceaued by perfect tokens: foꝛ a clod ſprinckled with a litle water, if in wooꝛking with the hand it be clammie, and cleauing, and ſticketh to the fyngers like Pitche, when it is handled as the Poete ſayth, and breaketh not in falling to the grounde, this ſheweth a naturall fatneſſe and richeneſſe to be in it: beſides, you may knowe the mould that is good foꝛ Coꝛne, yf it beare Bulruſhes, Thiſtels, Threelcaued graſſe, Danewooꝛt, Brambles, Blackthoꝛne, and ſuch like, as neuer growe but in good grounde: as on the other ſyde, lothſome and illfauoured weedes, declare a leane and a bitter ground: Ferne, and withered plantes, a colde grounde: ſadde, and heauy coloured, a moyſt and a wette ground: a raddell and a ſtony ground, is diſcerned by the eye, a ſtiffe and tough clay, by the labour and toyle of the Oxen. A good token is it alſo of good ground, where the Crowes and the Pyes folowe in great number the Plowe, ſcraping in the ſteppes of the Plowman. The goodneſſe is likewyſe knowen, yf at the Sunne ſetting, after a Raynebowe, and in a ſhewꝛe of rayne folowyng a great dꝛouthe, it yeeldeth a pleaſaunt ſauour: alſo in taſte it wyl appeare, yf taſting a clodde that hath been watred in an earthen veſſell, you finde it ſweete, it is a ſigne of riche grounde, yf bitter, a great token of barren grounde, yf it be ſalt: ſhe, it is to be ſhunned, and not to be vſed vppon the dounghill. You muſt remember alſo, that ground wyll ſome times change, and of fruitefull become barren, whiche hath been ſeene, as Plinie reporteth, in the olde time in Theſſali, and in our time, in ſundꝛy places of our Countrey. Beſide, one kind of ground, though it be neuer ſo fertill, wyll not beare all thinges, as the Poete wyſely noteth, Ne ſerues one ground for euery Croppe. Moꝛeouer, the diſpoſition of the Heauens is a great matter, all Countreys haue not the weather and ayre alike: wheꝛfoꝛe it is the part of a good huſband to knowe the nature and pꝛopertie of his ground, and to

Signes of the goodneſſe of the ground.

Grounde wyl change.

The diſpoſition of the heauens to be obſerued.

marke the disposition of it for euery part of the yeere: he must also consider what Croppe is best for euery layer. Some ground serueth for Corne, some for Vines, some for Oliues, some for Woddowe, some for Pasture, neither may all thinges well be sowen in riche grounde, nor nothing in barren ground. Suche thinges as neede not muche moysture, are best sowed in lyght ground, as the great Clauer, Sperie, Chich, and the other pulses that are pulled and not cut. Those that require more sustenaunce, are sowen in richer ground, as Potte hearbes, Wheate, Rye, Barley, Linseede. Some of them doo good to the grounde the yeere folowyng, as Lupines that are vsed to be sowen for the bettering of the grounde. There is difference also to be put betwixt fruites for pleasure, and such as be for profite: as fruite trees and flowres, and suche thinges as yeeld both pleasure and sustenance, and are also profitable to the grounde. You must choose for Wyllowes, Osyers, and Reedes, a wette and a marrish ground: and contrary where you wyll haue Corne & Pulse, that deligh̄tes in dry ground, Sperage & such like, must be sowen in shaddowy places, and other ground for Quicksets, Tymber, Mast, & Fewel: yea such ground as is very grauely and barren, hath his vse, where you may plant Birche & suche like, and waterie grounde where you may set Alders, Broome, and Bullrushes.

RIGO. Surely the temperature of the ayre, dooth very muche in the fruitefulnesse of the grounde, for I haue oftentimes marked, that one kinde of ground is more fruiteful in one Countrey, then in an other.

CONO. In Venesri, the Grauell grounde beares Oliues best, where as about Granado, they require the richest ground that may be. When in other places the Vine dooth not prosper very well in stonie groundes, about the Rhine the very ragged rockes doo yeelde as fruitefull Vines as may be seene. Plinie dooth witnesse, that in some places the Vines do grow euen in the Fennes and Marshes, suche a secrete force is there in Nature. About Chalcia, an Ilande about the Rodes, it is saide there is a peece of ground so fruitefull, that they mowe their Barley being sowed in his season, and their Croppe, sowe it agayne, and geather it with their other grayne. The Albanoyses receaue the fruite of their

lande

lande ἄπαστα καὶ ἄνηστα vntylled and vnsowen, and beyng once sowen, it yeeldeth his Croppe three yeeres togeather. Homer calleth Phrigea ἀμπελοέσσαν, and Argos πολύπυρον. Herodotus wryteth, that Babylon is so fruitefull, as the grounde yeeldeth encrease two hundred and three hundred folde. Plinie affyrmeth, the encrease in his time to be fiftie, and to good husbandes an hundred folde. About Monte Gibello, it is reported by credible persons, to be an hundred folde. Italy is so fruitefull, that Varro calleth it the Garden of the worlde, because it is so fertill and well planted in euery place: Campania, being full of Corne: Apulia, plenteous with Wine: and Venafri, aboundyng with oyle. Italy, the garden of the worlde.

RIGO. I haue heard say, that Germanie and Fraunce haue not been in times past very fertyll, and that they haue been altogeather without Vines, and nowe we see no Countrey more fruitefull, that yeeldeth greater aboundance of all thinges. Where can you finde better wines, then about Bauaer and the Rhine? I speake not of their great store of Grayne, Mines of Golde, Siluer, Iron, and Leade. In the Countrey of Thuryn in Germanie, it is sayde, that after Wheate once sowen, the ground wyll yeelde Rye of it selfe two yeeres togeather. The fruitefulnesse of Germanie.

CONO. Yea, and in our Countrey here, we haue ground that wyll beare Wheate euery yeere. Rape seede being once sowen with vs, dooth often yeeld his Crop two yeeres togeather, without sowyng or labouring.

RIGO. Under the Northren Pole it is reported the grounde is so fertyll, as they sowe in the Morning, and reape at Noone. In Barbarye, where the ground is lowe, they plant vnder the Date tree the Oliue, vnder the Oliue the Figge tree, vnder the Figge the Pomegranate, vnder it the Vine, vnder the Vine they sowe Wheate, and vnder Wheate Pulse, all prospering one vnder the others shadowe, and yeelding their fruite the same yeere. The fruitefulnesse of Barbary.

CONO. That made me to say, that the grounde folowes the disposition of the Heauens.

RIGO. But syth in all places the ground is not of lyke goodnesse, what yf we chaunce vppon a leane and a barren ground, as Heathy, Bushy, & Grauelly ground: may these be made fruitefull, and mended by arte?

CONO. Very well, there is no Countrey that the most gratious Lorde hath left without sufficient yeelde, yf labour and trauayle bee not refused.

RIGO. That skill I would gladly vnderstand.

Of dounging of ground

CONO. It is brought to passe diuers wayes, principally by dounging and diligent labour: and to this end serue those heapes of doung that I lately shewed you.

RIGO. I pray you let me knowe what doung dooth most enriche the ground.

The sortes of doung.

CONO. Varro, and Columella his folower, appoynt three sortes of dounges: the fyrst of Poultrie, the next of Men, the thirde of Cattell. Of the fyrst sort, the best is that whiche is had out of Douehouses, the next is of Pulleyne, and al other foule, except Geese and Duckes, which is hurtfull. The people in the old age had such store of Poultrie and Foule, as the doung of them sufficed for the manuring of theyr ground. The next to this, is mans ordure, if it be mixed with other rubbishe of the house: for of it selfe it is to hot, and burnes the grounde. Mans vrine beyng stre manethes kept, and powred vppon the rootes of Apple trees and Vines, bringeth great fruitefulnesse to the trees, and geueth a pleasant taste to the fruite. In the thirde place is the doung of Cattell, whereof the best is the doung of Asses, because this beast dooth chawe with most leysure, whereby his meate being wel digested, is made the profitabler doung. Next to this, is the doung of Sheepe, next of Goates, then of Oxen, and Horses: the woorst of all of Swyne, very hurtfull to Corne, but vsed in some places for Gardens, for lacke of other doung, but is a great breeder of noysome weedes: yet Plinie seemeth to allowe it, as the fylth of a filthy creature. The doung of Horses likewyse, where the Horses are fedde with Barley, dooth breede great store of weedes. The Lupine before he beare his Codde, is most commended, being turned vp with the Plowe or Mattocke, and layd in bundels about the rootes of Trees or Vines. Where they haue no store of Cattel, they vse to mend their ground with Straw and Ferne, and with the stalkes of Lupines, and the branches layde together in some Ditch: hereunto you may cast Asshes, the fylth of Synckes and Priuies, and strawe, with dust and other thinges

Vryne.

raked

raked togeather: but in the middest, you must lay some sounde matter against the breeding of Adders and Snakes: also Humlockes, Walwoort, and the weedes growyng about Wyllowe trees and Ferne, with other such rotten weedes you may geather and lay vnder your Sheepe. They that dwell in Grauelie and Heathie groundes, doo take the Turues of the Earth and the Heath, & laying them in heapes powdred with a litle doung, suffer them to lye & rotte, and after lay it vpon barren ground, but specially where they keepe great store of Sheepe, they cast into their Foldes suche Turues pared from the grounde. Columella countes them but eupll husbandes, that haue of euery one of the lesser kind of cattell lesse then a cart lode of doung in 300. dayes, and of eache of the greater sort tenne loade, beside the fylth and durt of the yarde. This is also to be noted, that the doung that hath lyen a yeere is best for Corne, for it both is of sufficient strength, and breedeth lesse weedes: but vppon Meddowe and Pasture, you must lay the newest, because it bringes most grasse, and this must be doone in Februarie, the Moone encreasing, for this is the best time to cause encrease of grasse. In the manuring of your ground, looke that you lay most doung vpon the toppe of the Hill, for the rayne wyll beare it to the lower partes fast ynough. He that mindes to haue his grounde beare Corne, yf he meane to sowe in the ende of Sommer, must turne in his doung in September: yf in the spring, he may lay it on at any time all the Winter. What time so euer it be doone, you must looke that the winde be Westerly, and the Moone in the wane. This obseruation helpeth greatly to the bettering of the grounde. Beside, you must not forget to let the doung be drye before it be layd vpon the ground. For though Columella doo bidde the contrary, our owne experience wylles vs not to folowe him: for doung whyle it is moyst, dooth more harme to the ground then good, as dayly experience teacheth. Nowe as your lande wyll ware colde, yf it be not dounged, so wil it be dryed or burnt, if it be manured yeerely, or to much. The watrie ground requireth more store of doung, and the dry ground the lesse.

Olde doung best for Corne, and newe doung for Meddowe.

The obseruing of the VVinde and the Moone, in mending of the ground

VVet doung hurtes the feelde.

RIGO. I remember I haue yet this seene Earth taken out of the Feeldes neere adioyning, and layde vppon the lande, I

therefore gelle, the earth may be mended with earth.

CONO. The Germanes, beſydes ſundry other ſortes of enriching of their groundes, doo in ſtead of doung, caſt vppon it a kinde of pith and fatneſſe of the earth: (Plinie countes it to be fyrſt deuiſed in Englande and Fraunce) called Marga, as it were the fatte of the Earth: but I rather thinke it to be the inuention of the Germanes, with whom yet both the name and the vſe is retayned: it is gotten in deepe pittes, but not alike in all ſoyles. That part of Fraunce that lyes vpon the Maaſe, dooth ſhewe a ſandy kinde of Marle, differing from the fatte Marle of Germanie, but of the ſame qualitie: whiche caried vppon the Sea in veſſels, is ſold as a great marchandize. In ſome places the ſkowring of Pondes and Ditches is vſed, to the great enriching of the grounde, in the mountaynie and barren groundes. In ſome Countreys they make their land very fruitefull with laying on of Chalke, as Plinie teſtifyeth of the Burgundians, and the Gaſkoynes. And in Germanie in our dayes, this maner of mendyng of ground is common. But long vſe of it, in the ende bringes the grounde to be ſtarke nought, whereby the common people haue a ſpeache, that ground enriched with Chalke, makes a riche father, and a beggerly ſonne. A litle lower, not farre from the Maaſe, in the Countrey of Lyege, they mende their lande with a kinde of ſlate ſtone, which caſt vpon the ground dooth moulder away, and makes the grounde fatter. In Lombardie they lyke ſo well the vſe of aſſhes, as they eſteeme it farre aboue any doung, thinking doung not meete to be vſed for the vnholſomeneſſe therof. Columella wryteth, that his Uncle was woont to mende ſandy and grauely groundes with Chalke, and chalkie & hard grounds with grauell and ſande, whereby he had alwayes goodly Corne. So doo I thinke, that Riuer lande by ouerflowynges, and falt ground with mudde mingled with ſande and grauell, wyll be made muche better.

Marle, a fat kinde of earth vſed commonly at this day in diuers partes of Suſſex and Kent, for the enriching of lande.

Chalke vſed for mending of ground.

Dounging with aſſhes.

RIGO. You haue taught me ſundry wayes of mendyng of ground, I would gladly nowe learne the ryght way of plowyng and ſowyng.

The maner of plowing.

CONO. In plowyng and orderly preparing grounde for ſeede, conſiſtes the cheefeſt poynt of huſbandry. Cato affyrmeth the

the fyrſt point of huſbandry, to be to prepare the grounde well, the ſeconde, to plowe it well, and the thirde, to doung it well. Of plowing and turnyng vp the grounde, the faſhion is diuers, accordyng to the nature of euery ſoyle & countrey. All great feeldes are tylled with the Plowe and the Share, the leſſer with the Spade. The Plowes are of ſundry faſhions, accordyng to the diuerſitie of Countreys, ſome ſingle, ſome double, ſome with wheeles, ſome without. The partes of the Plowe, are the Tayle, the Shelfe, the Beame, the Foote, the Coulter, the Share, the Wheeles, and the Staffe. The Share, is that which fyrſt cuttes the way for the Coulter, that afterwards turnes vp the Forowe. Where the ground is light, they vſe only a ſmall Share. In Liflande they haue for their Plowe nothing but a Forke. In Syria, where they can not goe very deepe, they vſe (as Theophraſtus writes) very little Plowes. Plinie wryteth, that wheeles for Plowes were deuiſed by the Frenchemen, and called Plugrat, a Germaine name, which corruptly is printed Planarati. In diuers places where the grounde is ſtiffe, they haue a litle wyng on the ryght ſyde of the Coulter, whiche wyng is to be remooued to whiche ſyde you liſt: with the Rodde or Staffe well poynted, the plowman maketh cleane his Coulter. When you woorke, your Oxen muſt be poked euen togeather, that they may drawe more handſomely with heads at libertie, and leſſe hurt to their neckes. This kinde of poking is better liked of many, then to be poked by the hornes: for the Cattell ſhalbe able to drawe better with the necke and the breſt, then they ſhall with their heades: and this way they put to the force of their whole bodyes, whereas the other way (being reſtrayned by the yoke on their heads) they are ſo greeued, as they ſcarſely race the vpper part of the earth. Where Horſes may be vſed, their vſe is more commodious for the Plowe, and the fewer of them the better: for many Horſes drawe too haſtyly, and make too large Furrowes, which is not good: whereby we ſee the grounde to be excellently well plowed in Gelderland, and about Coleyne, where they plowe alwayes with two Horſes, going very ſoftly. In Fraunce and other places, where they plowe with Oxen, they make theyr Furrowes rather deepe then brode. Where the ground is ſtiffe, the Coulter muſt

The partes of the plowe.

This drawing with the head, is vſed in the vpper partes of Fraunce and Spayne.

The like is vſed with vs in Norfolke, and Lincolnſhyre.

must be the greater and the stronger, that it may goe the deeper: for yf the crust of the earth be turned vp very hyde, it remayneth still hole, whereby neither the weedes are killed, nor the ground can be well harrowed. The Furrowe ought not to exceede one hundred and twentie foote in length, for yf it doo, as Columella sayth, it is hurtfull to the beastes, because they are to muche wearied withall: but this rule, where the feeldes are large, is not in many places regarded, as in the Countrey of Gulicke, where the feeldes are great, their Furrowes are drawen very long. You must not plowe in wette weather, nor wette ground, nor when after a long drouthe a little rayne falling, hath but wette the vtter part, and not gone deepe. If it be too wette when it is plowed, it dooth no good that yeere. You must therefore haue a regard to the temperature of your season, that it be neither to dry, nor to wette: for, too muche moysture maketh it to durtie, and too great dryneſſe maketh that it wyll neuer worke well: for eyther the hardneſſe of the Earth reſiſteth the Plowe, or yf it doo enter, it breakes it not small yenough, but turneth vp great flakes, hurtful to the next plowing. For though the land be as riche as may be, yet yf you goe any deapth, you shall haue it barren, which is turned vp in theſe great cloddes, whereby it happeneth that the bad moulde, mired with the good, peelyeth the wooyſer Croppe. Where you haue plowed in a dry season, it is good to haue some moysture in your second stirring, whiche moistning the grounde, shall make your labour the lighter. Where the grounde is riche, and hath long borne water, it is to be stirred againe when the weather wareth warme, and when the weedes are full growen, and haue their seedes in their toppe, whiche being plowed so thicke, as you can scarse see where the Coulter hath gone, vtterly killeth and deſtroyeth the weedes: beſides, through many stirringes, your Fallowe is brought to so fine a moulde, as it shall neede very little or no harrowing at all when you sowe it: for the old Romanes, as Columella wytneſſeth, would say that the ground was yll husbanded, that after sowing had neede of the Harrowe. Moreouer, the good husband must trie whether it be wel plowed or no, and not onely truſt your eyes, which (the Balkes being couered with mould) may easely be deceyued, but trie it with your

Dead mould

hand

hand (which is a certainer proofe) by thrusting downe a rodde into the Furrowe, which yf it pearce alike in euery place, it sheweth that the ground is wel plowed. If it be shallowe in one place, and deepe in an other, it declares the grounde to be euill handled in the plowing. If you are to plowe vpon a Hill, you must plowe ouerthwart, and not vp and downe: for therby the inconuenience of the steepenesse is met with, and the labour of both Man and Cattell is lightened: but herein you must beware, that you plow not alwayes one way, but sometime higher, sometime lower, woorking a slope, as you shall see cause. Touching the season of your plowing, it must be cheefely in the spring, as the Poete well teacheth. VVhen as the pleasaunt spryng. &c. For in Sommer the ground is to hard and churlishe, and in Winter to fowle and durtie: but in the Spring the ground being mellowe, is easely to be wrought, and the weedes are then best turned in, whiche both doo good for the enriching of the grounde, & plucked vp by the rootes before they haue seeded, will neuer spring agayne. And therefore with vs, we vse to begin to plowe about the middest of Marche: but in sandy and light grounde, they vse to plowe in the middest of Winter, yf the season will suffer. Plinie is of opinion, that stiffe ground also should then be stirred. A slendar and leuell ground, subiect to the water, would be fyrst plowed in the ende of August, and stirred againe in September, and prepared for sowyng about the twelfth of Marche. The light hilly ground, is not to be broken vp in Sommer, but about the Kalendes of September: for yf it be broken vp afore, being barren and without iuyce, it is burnt vp with the Sunne, and hath no goodnesse remayning in it. Wette ground, some would haue broken vp after the Ides of Aprill, whiche being plowed at that time, shoulde be stirred agayne about the tenth of June, and after againe, about the Kalendes of September, according to Columellaes minde. But those that are skilfull in husbandry agree, that after the tenth of June, without great store of rayne, you shall not plowe: for yf the yeere be wette, there is nothing to the contrary but you may plowe in July. In the meane time, beware that you deale not with ground ouerwette, as I gaue you warnyng before.

Tryall of good plowing.

The plowing of a hill

The best time of plowing.

RIGO. May I plowe in the night, yf I lyst?

CONO.

Plowyng in the nyght.

CONO. Yea very well, in Sommer time and in hotte Countreys you may begin in the Euening, and continue til the Sunne ryse, that the moisture and fatnesse of the grounde, may remayne shadowed vnder the Clodde: and that the Cattell through ouermuch heate of the Sunne, be not diseased nor hurt. Howe oft you shall plowe the ground that you meane to sowe, partly the nature of the soyle, and partly ỳ condition of the seede wyl teache you, as when we come to it, I wyl tel you: for it is not needeful to stirre a grauelly and a light ground, so often as the stiffe ground: yet we finde that land, the oftner it is stirred, the better it beares. So that for some seede, you must not only twyfallowe & threefallowe your ground, but also fourefallow it, as they vse in the fruitefullest places of Italy and Germanie. In Misnia and Austria, they plowe but twyse. Stiffe ground, as they commonly doo in Italy, is best to be sowed vpon the fifth stirring, in Tuscan, vpon the nienth. Thus hath euery Countrey both in this, and other matters, his fashion, according to the nature of the grounde.

RIGO. But may I not sowe one peece of grounde euery yeere without resting?

CONO. There are some groundes you may sowe yeerely, as in Italy and Austria, and likewyse in some partes here about the Riuer, that are fruiteful eyther by nature, or by ouerflowyng. In other places you must obserue the olde saying of the husbande, Take not too muche of your grounde. Virgil would haue grounde rest euery other yeere: which, if you haue store of ground, out of al doubt is best. Hereof had the ground, that is sowed euery yeere, his name in the olde tyme: but commonly euen the best grounde requireth rest the third, the fourth, or (at ỳ farthest) the fifth yeere. Varro wryteth, that in Olynthia the lande beareth euery yeere, and euery thirde yeere most plentifully. But yf you wyll doo well, you must let it lye euery other yeere, according to the nature of the soyle, or els sowe it with lighter seede, that soketh out lesse the substance of the ground, as Lupines and others, that we wyl shortly entreate of. It is also muche to be considered, whether the ground that you plowe be laye ground yeerely sowen, or fallowe. If you breake vp newe ground, yf it be riche, heauie, and prepared for seede, it suffiseth to plowe it once, and to sowe it immediatly,

ably, and harrowe it. If it be light and grauelly ground, you must thyfallowe it, specially at the first breaking vp.

RIGO. Here you speake of diuers tearmes belonging to this trade, I pray you make me to vnderstand them, before you proceede any farther. Diuers Latine vvoords belong to husbandry, interpreted.

CONO. This arte (as likewyse al other) hath certaine woordes peculiar and belonging to it selfe: and because sundry men of good learning haue herein been deceiued, least my matter shoulde be marred with darke and strange tearmes, I wyl declare the woordes as plaine as I can, digressing a whyle from my farther speache.

RIGO. I beseeche you hartely.

CONO. We take Agrum, a Feelde in our speache, not for a iurisdiction, a Dioceese, or a Shire, as the olde Lawiers take it: but with Iabolenus and Florentinus, we count it a parcell of grounde, eyther earable or pasture. Ager, Aruus, or Arum, we call earable grounde that is to be plowed and sowen. Varro would rather haue it called Aratum and not Satum. The Feelde that is called Restibilis, is that which is renewed euery yeere sowen, called of the Greke ἀλλοετὴς because his fruitefulnesse continueth to the next yeere, & yeeldeth his Crop euery yeere. Ager Nouales, is called of Varro, the grounde that hath been sowed & fallowed: of Plinie counted to be sowen euery other yeere: with the Lawiers it is counted ground newe plowed, that hath lyen a yeere: we, according to the vulgar speache (for we must speake with the most, & iudge with the fewest) doo call Nouale Agrum, that which is new broken vp, and hath not before been plowed, whereof commeth Noualium Decimæ, the tythes of new broken vp land, yet I know there are some learned that count it that, which after his Crop lyes lay. Vervactum is of Varro taken for ỳ grounde, that in the Spring time is turned vp, and hath been for a whyle spared. Oftentimes is this also called Nouale, both the feelde that hath lyen a yeere, and that whiche is broken vp the first Spring: for thus saith Varro, There is great difference whether you sowe in vntilled ground, or in that whiche is yeerely sowen, and is called Restibilis, or in that whiche hath lyen a while, and is broken vp in the Spring. Moreouer, both Columella, and Plinie, doo vse not seeldome Vervactum, for ground newe broken

Agri Voca.

broken vp in the Spring, taking their reason of the time, whereby νέος, νεομήνη νεατός, νεάγεος, may be interpreted by the name of Veruactum, or Nouale. The Feelde is saide to be plowed, to be stirred with the Plowe when it is turned vp: τολεῖν as Hesiodus saith, ἔτι τολεῖν θέρεος δὲ νεομήνη οὐ σε ἀποπαύσει, it is broken vp when it is first plowed lying in great Cloddes: the seconde plowing is called Offingere Agrum, or Iterare, to plowe againe, ἐντολεῖν Tertiare to thyr allowe it. Ager iteratus, and tertiatus, be vsuall wordes with Columella and Plinie. Nouare, is to chaunge the grounde well husbanded before, and to plowe it and prepare it for the sowing season. Occare, to harrowe it, as Varro sayth, is so to breake it, as there remaine no Clodde. The Harrowe, is an instrument crosse lettused, to breake the Cloddes withall, and to couer the seedes. Cratire, is likewyse vsed in the same signification. Arare, is when that which is sowen and come to some grouth, is turned in with the Plowe. Plinie calleth Ararare, as it were Aratrare, to plow often that which is sowen. Sarrire, is to purge with the Rake. Runcare, is to weede out of the grounde noisome weedes, for whiche is also vsed Auerruncare and deruncare, and of Columella, Exherbare. Pastinare, and Repastinare, is to digge about the Vines. Pastinum, is a forked instrument vsed in planting of Vines. Lirare, and Occare, are almost one, where we plowe, so as we leaue betwixt two Furrowes a Ridge, for the vse keeping of the graine like a Garden bedde. And hereof is that space called Lira a Ridge, whiche the husbandmen call Porcas, because the place being rayled hye, defendeth the Corne from the water, & Lira Hortensis, a bed in a Garden. Scamnum, a Balke, is the grosse earth that hath scaped the Plowe. Plinie wylleth, that there be no Balkes made, nor great Cloddes remayning, meaning the great Turffe that is turned vp at the fyrst plowing. Scamnatus Ager, is called of Vibius Vrbicus, that lande which runneth all in length from West to East, whiche yf it be more of length then breadth, and lyeth vpon the North, is called Strigatus. The land it selfe is also called grosse and rawe, that is not well mellowed, whiche hath neede to be seasoned with the heate of the Sommer, and the colde of Winter, and to be plowed in the Spring. It is also called riche, fruitefull, fertyll: and that which is nought and yeeldes not his fruite, is called leane, barren, hungry,

hungry, or brynishe, ἁλιόδρυα. Also salt, bitter: fennishe, where the water still continues: wette, that some time lyes drye: Carbunckled, that is burnt with the sonne, rotten and mossie. It is also called pleasaunt ground, sweete, blacke, rotten, and mellowed, which are the signes of good ground: but hereof I thinke I haue nowe spoken sufficiently.

RIGO. That you may continue your speache, I pray you goe to your former matter agayne.

CONO. When you haue broken vp your ground, yf it be Nouales as I sayde, and not tylled before, you may sowe it presently, and harrowe it, and yf neede be, raake it. The ground that is peerely sowen, & that hath lyne spare, is to be plowed thryse, according to the nature of the soyle, and the seede that you meane to sowe.

RIGO. Nowe you haue tolde me howe to order my lande for seede, I pray you let me vnderstande the sortes of seede, and in what sort they must be sowed.

CONO. That must I doo. The seede that commeth of that whiche the Latines call Fruges, as Pulse and Corne, we here doo call Fruges, all sortes of harueste grayne, which the Germanes call γνία and σφαῖρα, because they are geathered in their beautie and their ripenesse. Iulian the Lawyer, calleth Fruges all thinges wherewith a man is sedde. The auncient writers doo vnderstand it more largely, for all the fruites of the earth. Plinie deuides it into two kindes, into Corne that growes on Eare, as Gallus the Lawyer defines it: the other that beareth Coddes, as all kinde of Pulse, or pedware. Of the first kinde, is Wheate, Rye, Barley, Bigge, Otes, Beechewheate, or Bucke, or if you will in Greeke ὀρυζόπυρος, Ryse, & Lenten Wheate, though all kindes growe not in all places, nor haue in euery place all one name. In some places you haue not Lenten Wheate, cheefely where there is plentie of Bigge. In other places they vse neither Otes nor Bucke. Of the kindes of Pulse are these, Beanes, Pease, Lentiles, Chiches, Tares, Lintels, Lupines, and suche lyke. And though there be sundry sortes of seede, and euery Countrey hath his kinde, and sowes such as best agrees with their nature: yet generally this is to be regarded, that you sowe none that are olde and dryed, but the newest: for olde seede dooth oftentymes

Of seede, & their diuersitie.

Olde seede not to be sowen.

as

as they wyte, change their nature: as the seede of Colwoortes, that being sowen, turneth to Rapes, and Rape seede likewyse into Colwoortes. The seede of the fyrst yeere is best, of two yeere olde woorse, and of three, woorst of all, the rest is barren and nought. The best seede also is that which is waightiest, and lyeth in the bottome, and such as is full, and being broken hath a good colour: such as is wrinckled, and thinne in the eare, is to be throwen away. There is also another necessarie note, to haue the seede from strange grounde, & from the woorse to the better, and not the contrary, nor from colde Countreys into hotte, nor from the forward to the slowe, and to beware that it be not bitten with Birdes, Wisc, or Antes: and to prosper the better, sprinckle them before they be sowen, with the puice of Houseleeke. If you mingle with your grayne the seede of Bearfoote, and sowe it about your grounde, you shal saue it from the anoyance of Birdes.

The order of sowyng.

You must sowe your Ridges with an equall hande, καὶ ὁμαλῶς, and all alike in euery place, letting your foote (specially the right foote) & your hand go togeather: Wheate, Rye, Barly, Otes, and other, cheefely such as beare Coddes, as Milium, and Panicum, must be sowen with a ful hand, but Rape seede only with three fingers.

RIGO. A man must vse his hande I perceaue, as the Harper dooth, to make it perfite.

CONO. He must in deede. And as we put more water to stronger wine then we doo to small, and laye the greater burden vpon the stronger man, and some stomacke requires the stronger foode, so some grounde may beare muche seede, and some away with lesse: neither can it be certaynely appoynted, howe muche seede is generally to be cast vppon an acre: though I knowe the olde wryters appoynted certayne quantitie to euery acre, whiche perhaps might serue with them: but we shoulde foulie deceaue our selues, yf we shoulde obserue the lyke in euery place. First, because some grounde requireth more seede then other, as the grounde is of stiffenesse or lightnesse: for the stiffer ground (as in Hollande neere the Rhyne) requires muche seede, where lighter grounde requireth lesse. The timely sowing, the thinner: and the later, as Columella sayth, the thicker. Secondly, their measures and acres differ, as the thing that at this day is

not

not throughly agreed vpon. But nowe you shal heare what seede euery ground requireth.

RIGO. That I long to heare.

CONO. After long rest, or the fyrst dounging, eyther Barley or Wheate is to be sowen: but Wheate, though it require good ground, yet yf the ground be to riche where it is sowen, it wyll growe to ranke, and lye leadge vpon the grounde. And therefore vppon suche grounde, it is best to sowe your Wheate after a crop of Barley, Pease, or Buck, and after your Wheate crop, to sowe it with Rye: and then againe (yf the grounde ware not poore) with Barley. In very riche grounde, immediatly after the gearhering of Rape seede, plowe it presently for Bucke, whereby you may haue two Croppes in one yeere. In like maner the Cabegged Rape sowen after Rye, maketh two harueستes in one yeere. Pease, Beanes, Tares, and Fitches, and almost al Pulse els, requireth riche ground, which afterwards may yeerely serue for Wheate, Milium, and Rape. Plinie woulde not haue Rapes sowen, but in very well dunged ground: but we finde by experience, that after a croppe of Rye in meane ground, you shall haue the same yeere great Rapes. Sandy and Graueliy ground, must rest euery third yeere, for two or three yeeres, that being then well dounged, you may sowe Rye, or Buck, and after Oates. In good pasture ground newe broken vp, you may sowe Oates after the fyrst plowing, after that, Rape seede, then Barley, after that Wheate, or Rye, and at last Oates, or Rye, yf the nature of the countrey be for it. When this is doone, you must eyther doung it, or let it lye laye. If the ground be mellowe, after Barley in some places they sowe Millet, then Radishe, after that Barley, and Wheate, as in Campania: and such ground is sufficiently plowed, when it is sowen in some place where Lenten Wheate is sowen, it restes three monethes, & after is sowen with Beanes in the Spring, in no other wyse may you charge indifferent ground. If after two seasons of Corne, you sowe Pulse or Pedware, the barrenner ground must rest three yeeres. Some wyl in no case haue you sowe Wheate, or Barley, in ground that lyes fallowe. After that ye haue thus sowen your seede in ground wyse plowed and well prepared, then must you straight waye Harrowing.

harrowe it, which is doone with a lettused instrument full of teeth drawen vpon the ground, whereby the Clodes are broken, and the seede couered: in some places it is doone with a boorde tyed to the Plowe, whiche they call in Latine Lirare. Sometime Rakyng is needefull, whiche in the Spring, looseth the earth made clunged with the cold of Winter, & letteth in the freshe warmth. It is best to rake Wheate, Barley, and Beanes, twyse. Moreouer, they breake a sunder with the Rouler the greater and stiffer Clods. Weeding is when the Corne is knotted, the naughtie weedes being plucked vp, deliuereth the rootes of the Corne, and seuereth it. To speake of the season of Sowyng, it is agreed vpon of all men, that there ought to be no sowing in Winter, for the Winter Corne when it is sowed before Winter, appeareth aboue the ground somtimes within a seuennight after, which yf it be sowed after Winter is begunne, it scarsely appeareth in fourtie dayes after. Some very fondly thinke it better to sowe in the Spring, then in Autumne. Plinie writeth, that in Treuers the Haruest being in, they haue sowed in the coldest of Winter, and rakyng their grounde in the spring, haue had an excellent good Croppe after. Amongst our haruest sedes, there are some harder that are able to abide the Winter, which are sowen in hot Countreys, as Virgil sayth, about the setting of the seuen starres, which Columella vnderstandeth to be about one and thirtie dayes after the Autumne Æquinoctial, that is, the nienth Kalendes of Nouember, and in Fraunce and Germanie in September, and the beginning of October, as Rape seede, Wheate, Rye, Winter Barley, that are nourished in the blade all Winter, and grow vp towardes earing in the Spring. Some there be that wyll you to sowe before, only in drye ground and hotte Countreys. Some agayne woulde haue you sowe in colde Countreys after the Autumne Æquinoctial, in hotte Countreys later, least they shoulde florishe before the Winter, and be destroyed of woormes, or blasted. Some on the other side make haste, saying, That soone sowing sometimes deceaues, but late sowing, euer. It is good reason to sowe timely in wette groundes, that the seede rotte not with ouer muche moysture, and later in drye groundes, least lying long and not sprowting, it come to nought. Also, in timely sowyng, to sowe thicker,

Rakyng.

Rouvlyng.

The tyme for sowyng.

Late sowe-ing alwayes fayleth.

thicker, because it is slowe in rooting, and in later sowyng, thinner, least with the thicknesse it be choked. Sommer seeues, wyche are sowed before the risyng of the seuen starres, and in the Spring, as Beanes, Pease, and suche, Pulse, Millet, Panicum, Sesamum, Sommer Barley, Flaxe, Hempe, Oates, Buck, Sporia, and suche other, are sowed in the Spring time. In Asia and Grece they sowe all as they say, at the setting of the seuen starres. Now, although there be certaine precepts of the tyme of sowing, and howe muche seede is meete for euery quantitie of grounde: surely, they might as I haue saide before, for their owne Countrey and nature of their ground, geue a kind of gesse: but to determine any thing herein certainely, there is no man that can doo it, but the ground and euery mans owne practise is herein the best maister. One auncient generall rule of husbandry there is, wherein we are warned in cold Countreys to sowe late, in temperate Countreyes sooner, and in hot regions soonest of al. Eratosthenes sayth, that India is subiect to muche raynes in Sommer, and that then they sowe Flaxe, Sesamum, Ryse, and Millet: and in Winter, Wheate, Barley, Pedware, and other fruites that we haue not. Hesiodus, the Prince in his time of husbandry, wylls vs to sowe accordyng to the custome of Grece, his naturall countrey. Virgil, Cato, Varro, Columella, and Plinie, appoint their rules for Italy, whose mindes yf you wyll haue followed in all other places, you shall but seeke to couer euery pot with one couer. But to come to the matter, sythe the seeds of sundry natures, require sundry times of sowyng, and diuers sortes of ordering, and that herein euery Countrey hath his guise, I wyll here (obseruing suche customes as are most generall to them all) seuerally shewe you of euery seede by him selfe, and so declare vnto you the order of their sowyng. And first, amongest all the fruites and grayne that the Earth dooth yeeld for our sustenance, the cheefest place is rightly geuen vnto Wheate, called in Greke πυρός, in Italian Grano, in Espanishe Trigo, in Dutch VVeyse, in Frenche Fourment, as a grayne most needefull for man, and therefore most fruitefull, because God hath ordayned it to nourishe man withall. It is woonderfull what yeeld it hath been of in some Countreys. Augustus his deputie sent hym from Byzacee in Africa;

Sommer grayne.

A generall rule.

VVheate.

frica, of one grayne of Wheate foure hundred branches. And Plinie witnesseth, that in the same place, one bushel hath yeelded a hundred and fyftie bushels.

RIGO. There are that holde opinion, that this which the common people call Wheate, the Germanes VVeyss, and the Hollanders Terue, is not the true Wheate, but a kinde of Rye, and that the true Wheate whiche the Italians call Grano, groweth onely in Italy and in Spayne.

CONO. That whiche growes in Italy and Cicil at this day, differeth not from ours in fashion, colour, nor flowre, though the grayne there be somewhat great, and the flowre more clammey, whiche maketh it that it can not be long kept, specially about Rome. And whereas our Wheate is eyther bearded or pollarde, theirs is altogeather pold: we call it pold or pollard, that hath no Aanes vpon the eares. And that we call ỳ Aane, which groweth out of the eare like a long pricke or a darte, whereby the eare is defended from the daunger of Birdes. With Virgil the Aane is vsed for the Corne, as the parke for ỳ Wheate. Gluma is the huske of the Corne whose top is the Aane. Fait is the small grayne lesser then the corne that growes in the top of the ripe eare. To returne to the Wheate, I graunt there are some that doubt of this Wheate of ours, suche hath been the iniurie of the tyme (as all thinges almost forgotten) we scarsely knowe howe to name the foode that we dayly feede of. For my part, I wyl followe common vse as a maistresse in speache. The olde writers haue written of sundry sortes of Wheate, whereof they haue thought that most needefull to be sowen, whiche they called Robus, as the fayrest and wayghtiest. The second called Siligo, they vsed in their fynest Cheate. The thirde, they called Trimestre, because it woulde be ripe in three monethes after the sowing. Though Columella alowe no suche kinde, yet was it most auncient with the Grekes, and called Trimenon, growyng onely in the colde countreys. In Thracia they haue a kinde that is ripe in two monethes, and is couered with a number of huskes, against the extreme colde of the Countrey. In our Countreys also we haue Wheate and Rye, that we sowe with our Sommer grayne, as we likewyse doo Rape seede, but to no great commoditie: for the Winter seedes

to

too farre exceede them, and being nouriſhed in the earth al Winter, they proone, as Theophraſtus ſayth, of more ſubſtance and profyte: Amongeſt all theſe ſortes Plinie recounteth the Wheate of Italy to be the beſt, both for beautie and weyght. We vſe with vs only two ſortes, differing in this, that the one hath ſmoothe eares without any beardes, the other with long beardes or Aanes, very ruffe and ſharpe, not much vnlike to Winter Barley: in al other properties they are both alike. It is ſowen in September, the ſeaſon being fayre, the grounde thryſe plowed and well raked or harrowed, although you may ſowe it very well after once plowing vpon grounde where Peaſe, Tares, or Buck hath been newly had of, in a good ſoyle. Plinie and Columella woulde haue you ſowe of Wheate and Rye, fyue buſſhels vpon an acre: but as I haue ſaide before, this meaſure is to be meaſured by reaſon. We at this day ſowe not ſo much Wheate vpon an acre as Rye, nor ſo much Rye as Barley. It is beſt, yf the Winter be like to be colde, to ſowe the ſooner: yf warme, the later. Wheate delighteth in a leuell, riche, warme, and a drye ground: a ſhaddowy, weedy, and a hilly ground it loueth not, though Plinie ſay the hil yeeldeth harder Wheate, but no great ſtore. After it is ſowen, it putteth out a great company of ſmall rootes, and appeareth at the fyrſt wy or blade: it hath ſundry ſtalkes, but ſuche as can not branche all the Winter, as other Winter Corne is, it is nouriſhed in blade: when the Spring draweth on, it beginneth to ſpindle: vpon the thirde or fourth ioynt thereof, commeth out the eare, which fyrſt appeareth encloſed in the blade, it flowreth the fourth or fyfth day after: yf it growe to rancke at the fyrſt, it is eaten downe with cattel, or in ſome place mowed: it is after weeded, it flowres about ỳ tenth of June, ſooner or later, as the yeere falles out, euen at one time almoſt with ỳ Vine, two noble floures with comfortable ſauour flouriſhing at once. Varro affyrmeth, that the Wheate lyeth fyfteene dayes in the blade, flouriſheth fyfteene, and ripeth fyfteene: after it hath flowred it wareth greater, and as Theophraſtus ſayth, is within fourtie dayes after ful ripe, where with the lateſt they reape in the eyght moneth. Other ſay in ſixe and thirtie dayes, & reaped in the nienth moneth. It neuer eares, tyll al his ioyntes or knottes be growen. There are foure iointes

The tyme for VVheate ſovvyng.

in Wheate, as Plinie sayth, and eyght in Barley: but in our countrey and our dayes, both Wheate, Rye, Barley, and Oates, haue but foure, and that not alwayes. Before the full number of the ioyntes, there is no appearing of the eare: whiche when it commeth, beginneth to flowre within foure or fyue dayes, and so many, or little more, it fadeth. When the flowre is gone, the grayne begins to swel, and in foure or fyue dayes after to ripe. The blade of the Wheate is something like a Sedge, but narrower then the Barley: the Spindel, Stalke, or Strawe thereof, is smoother and gentler, and not so brittle as of Barley. It is closed in many coates. The stalke that beareth the eare is higher then that of Barley, the eare groweth more vpryght and farther from the blade, the chaffe is softer, sweeter, and more full of iuyce, the eare of Wheate is out of order and vneuen, as well of the Pollard as of the bearded, where as Barley hath his eare of iust number and in perfect order. In Bactria, it is sayde a grayne of Wheate is equall in quantitie to an eare of our Wheate. In Babylon, the blades both of Wheate and Barley, as Herodotus reporteth, are foure inches brode. Wheate, as Columella wryteth, after the third sowing chaungeth to Rye, which hath been knowen in Germanie, as I sayde before, in many places. Of Wheate is made Amyl, the making whereof Cato and Dioscorides teacheth. After Wheate we sowe with vs Rye. There are that thinke it to be that whiche the Greekes call ὄλυρα, though Homer take ὄλυραν for a kinde of foode for Horses: some others take it for a kinde of Wheate. Herodotus sayth, Bread was made of it. Of Laurentius, it is called Far, of Gasa, Siligo. Diuers learned men call it Secale, and take it for Plinies farrago: the Frenchemen cal it Segle, the Dutchemen Rock, the Italians almost as the Latines Sægala: the grayne is something blacke, and maketh blackishe bread. But to passe ouer all controuersies, I folowe the Countrey speache, and take Siligo for our common Rye whiche is sowed immediatly after Wheate, about the ende of September, or in the beginning of October, in good ground: in sandy and grauelly ground, it is sowed in Februarie, and called Sommer Wheate: it requireth the best grounde, warme, and fast, and refuseth not light grounde and grauelly, so it be helped with doung: it loueth wette grounde as ill as

Wheate,

Wheate, they both require to be sowen in a deepe moulde and a plaine soyle: but Rye is sowed a litle after Wheate, in the sowyng whereof, you must occupie a thirde part more then of Wheate: it prospereth lightly in any grounde, and many times with the yeeld of a hundred for one. It must be sowed after the third plowing as Wheate & harrowed much after the same sort, the stalke or steale thereof, is smaller then the Wheate stalke, taller, and stronger, his eare hanging downewardes, and therefore more subiect to blasting, because it receiueth and keepeth the water that falles whyle it flowreth, and suffereth the violence of mystes and frostes: the strawe thereof is gentle and flexible, seruing for Vines and coueringes of houses. Nowe foloweth Barley, accounted in the olde generations among the woorthyest sort of grayne, and not of small estimation at this day. The Italians call it Beade or Beaue, or Orze: the Spaniards Cenada: the Dutchmen Gerst: the Frenchemen Orge: the Grecians κρίθη: and though it be vsed in Greece and Italie, and suche warme and fruitefull Countreys for cattelles foode, as Homer also witnesseth, yet in the Northerne Countreyes it supplies the place both of Bread and Wine. There are of it two sortes Hexastichon and Polystichum, whose eares are three, foure, & sometimes sixe square, and diuers eares springing from one grayne, euery eare conteynyng aboue fourescore graynes, so woonderfull are the gyftes and blessinges of GOD. The other sort is called Distichon, hauing in the eare but two rankes or orders only. Agayne, there is one kinde of it to be sowed in Winter, an other for Sommer. The Winter Barley is of better yeeld, but it is soone hurt, specially with much wette and frostes folowyng. There is nothyng more hurtfull to Winter Corne, specially Barley, Rape seede, and Rye, then the wette of Winter, nipped with often frostes, and after a warme thawe to be presently frozen agayne: both the sortes of Barley require grounde that is very riche. Winter Barley after two or three plowinges, is to be sowed in September: Sommer Barley in March, or April, after twyse plowing: and many times, necessitie forcing, after once plowing: in the sowing, you must occupie more seede by halfe, then in sowyng of Wheate: it requires a mellowe and a fatte ground, and therfore Barley.

is best sowed, where the grounde is most manured. The Winter seede flowreth in May, and is ripe in June at the furthest. This kinde was not woont to be sowed in these partes, but great numbers nowe, mooued by my example, doo vse and receiue great gaynes by it. The Sommer Barley in many Countreys is ripe and redy in three monethes after the sowyng. In Aragon as Plinie wryteth, it maketh double haruestes euery yeere. The seuenth day after it is sowen, it commeth vp, and one end of the seede runneth downe in roote, the other, that sooner springeth, commeth vp in blade: the greater ende of the grayne maketh the roote, and the slenderer the flowre. In other grayne the roote and the blade spring both from one part, the blades of both kindes are rufke. It must be geathered with more speede then other graynes, for the strawe of it is very brittell. Of Barley is made, as Dioscorides wryteth, both Beere and Ale.

RIGO. I lyke your Beere you haue excellently wel, I pray you tell me in what sort you make it?

CONO. I wyll not hyde my cunnyng in this matter. My Barley is fyrst steeped in a Sestorne of water a day or two, yf it be Winter seede it is harder hulled, and requireth the longer watering. The Sommer grayne is thinner, and requireth a lesser tyme. When it is watred, I drye it vpon a floore or a keel, tyll it swel and breake, putting out as it were litle beardes or threds: yf it be layde thinne, it wyll in Sommer, specially in March, drye and breake of it selfe without any fyre. You must take good heede that in sprowting it open not to much, and loose his flowre. This being doone I grinde it, and put the meale into a Mash Fatte, whereunto I put my licour sodden, and after let it seethe three or foure times, adding vnto it, both for holsomenesse and taste, the flowre of the Hoppe: after this, I put on Yeest, and set it a woorkyng, and then cleanse it. The more it is cleansed, the holsomer and cleerer it is: that whiche commeth of the spurging, is kept both for brewing and baking: the drinke wyll be the better, yf you put to it a fourth part or sirth part of Wheate: the more Corne you lay on, the pleasaunter and better coloured wyll your Beere be. Your greatest care must be to see it well sodden, well cleansed, and well hopped, otherwyse Malt of it selfe wyll soone corrupt.

corrupt. Obſeruing this order, your drinke ſhalbe both holſome and pleaſant: that endureth beſt and longeſt, that is brewed in March. There is made of Barley Alica, a reaſonable good meate, and Ptiſan. How they muſt be made, you may reade in Plinie. Next to Wheate and Barley, foloweth Zea, which the common people both in Italy, Spaine, and Flaunders, call Spelta: the Frenche call it Eſpeltra, with Homer is greatly commended ζειδωρος & αρουρα, the feelde that beareth the Zeam, being as Galen ſayth, the meane betwixt Wheate and Barley, for he hath the qualities of eache of them, for is of two ſortes, the one in ſtalke, ioynt, and eare, like to Wheate, and carieth in euery huſke two ſeedes, and therefore is called δικοκκος, the other hauing both ſtalke and eare ſhorter, and but one grayne in euery huſke, growing in two rankes, and in the toppe reſembling Barley with his ſharpe Aanes. In Italy, ſpecially about Mirandula and Concordia, it is vſed in prouender for Horſes, it is not in theſe Countreys in vſe. I woulde ſowe it here, ſyth the ground wyll well ſerue for it, and that both bread and drinke might be made of it very well, but that it is ſomething troubleſome to grinde, becauſe of the double huſkes. It deſyreth a moyſt ground, riche and good, it is ſowed, after the ſame maner that Wheate is ſowed, in September or October: it flowreth in June, and is ripe in July, very meete for cold Countreys, becauſe it can abide froſt and ſtormes. Zea.

RIGO. There is (as I remember) a kinde of Wheate called Far, the auncient people called it Adoreum, that groweth in many Countreys. Far. Adoreum.

CONO. You ſay true, for with the olde ſort Far was a generall name to all Corne, as Wheate Far, Barley Far, and Rye Far, and when Mylles were not yet deuiſed, they did beate their Corne in Morters, whereof came, that the Meale was called Farina: yet after, was the name of Far onely geuen to Adoreum, though Columella called it alwayes Far Adoreum, making foure ſundry ſortes of it. The Frenchemen call it Brance, the Italians Sandala, the Spaniardes Eſcandia, the common people of our Countrey call it Farro, the Dutche Keſkorne, whoſe grayne is very like Wheate, but that it is ſhorter and thicker, and where Wheate hath a clift, there hath it a riſyng: it is heauier then Barley, and lighter then Wheate,

Wheate, it yeeldeth more Meale then any other Corne. The people of Rome as Plinie sayth, liued with this Corne at the first three hundred yeeres, it groweth in Egypt without Aane, with a greater eare and a waighter, it hath in the stalke seuen ioyntes, and can not be cleansed, except it be parched. Fraunce hath two sortes therof, one of a reddishe colour, which the people cal redde Wheate, the other whiter, whiche they call white Wheate. the eare is threesquare, not vnlike to spelt. In Italy they make pottage of it for their labourers. For ar Adoreum, Virgil would haue sowen before the setting of the seuen starres, after the Æquinoctiall of Autum: but in wette and colde barren groundes, it is best to sowe it about the Kalendes of October, that it may take deepe roote before the freezing and colde in Winter. It is sowed in lowe grounde, watrishe, and chalkie: after it is sowed, it must be harrawed, raked, and weeded: the raking looseth in the Spring, the heauie shactes of Winter. In raking or harrawyng, you must take heede, as I haue said before, that you hurte not the rootes: weeding when it is knotted, seuereth the Corne from all anoyances. The Frenchemen sowe it in hollowe Furrowes, because it is very subiect to blasting, thinking thereby to preserue it both from blast and mildewe. To sowe it in hie ground is discommended, though it prospereth there well yenough, because cattell can not away with it, for the sharpenesse and ruffenesse of the eares, and because it requireth great labour in getting of the huskes, which yf it be not cleared of, is neither good for man nor beast: the vncleane Chaffe dooth hurt with the Cough the Cattelles lunges. Amongest the Winter seedes, Rape seede dooth chalenge his place, whiche I take to be the seede of the Rape which Plinie maketh for his third kinde, and wylde, whose roote, lyke the Raddishe, runneth in length, the leaues being ruffe like the other kindes, and the stalke bushy and full of branches: the roote of it is good for nothing, but is onely sowed for the seede, whereof they make oyle seruing for poore mens kitchins, faltes, and lightes, specially in Germanie where they want the oyle of Oliues, whereby aryseth great gaynes to the husbandman. In the hotte Countreyes where they haue other oyle yenough, this seede is of no vse but in feeding of Byrdes: it is sowed in the ende of

Rape.

August,

August, or the beginnyng of September: howe be it, sometime it is sowen in March among the Sommer seedes, but to nothing so great a profite: it is cast into very riche grounde or wel manured, thyse plowed and well tylled, it must be sowed very thinne: for being a very small seede, it must not be sowed with the full hande as Wheate is, but onely with three fyngers: it floweth in March or there abouts, as the yeere is forward, and contineweth his flowring a long time: the flowre is yellowe and very sweete, wherein Bees doo muche delight: as soone as it hath left flowring, it is presently ripe, it groweth two cubites in height bearing a plentifull seede in litle small Coddes, it rendreth for one bushell, a hundred busshels of seede. Hitherto haue I spoken of Winter seedes, nowe must I tell you of suche as are sowen towardes Sommer.

RIGO. Wyll you speake nothing of the Rape roote which is greatly occupied of the husbandman, and not to be despised as a thing that groweth in great quantitie, & is meetely good meate both for man and beast.

CONO. The Rape is named of the Greekes γογγύλη, in Italian Rapo, in Spanishe Nabo, in Frenche Rauen. The ordering of which, though I tooke it to belong to the garden, wherein you are able to say more then I, yet because you require it, and that sometime the husbandmen doo plant them in their Feeldes, I wyl tell you as much as I knowe therein. There are two kindes of them, the fyrst dooth roote all in length lyke the Radishe, whiche in many places of Germanie is used for a dayntie meate, the other eyther groweth in great roundnesse, or els very flatte: they are nourished with mystes, frostes, and cold, three monethes togeather, and growe to an exceedyng greatnesse. Plinie writeth, that he hath seene Rootes of them that haue weyghed fourtie pound. Some say, they haue seene of them that haue weyghed an hundred pounde. It is woonderfull, that of so litle a seede shoulde come so great a roote. The Greekes make two kindes of them, the male and the female, both comming of one seede, the male when it is sowed thicke, and the female when it is sowed thinne. There are two seasons for the sowing of it, eyther in Marche, whiche wyll be ripe about the tenth of June, or in July or August,

guſt, after the firſt plowyng, commonly vppon the ground where Rye and Winter Barley haue been newely had of. It is thought they are the ſweeter by lying in the ground all Winter, when as the encreaſe is not in the leafe, but in the roote. They are alſo ſowed (as Plinie wryteth) in hot & moyſt Countreys in the ſpring, and wyll the better encreaſe yf they be ſowed with Chaffe, who woulde alſo haue the ſower naked, and in caſtyng the ſeede, to wyſhe good lucke to hym ſelfe, and to his neyghbours. They are preſerued from the Caterpiller, which commonly conſumeth the young leaues, by mingling the ſeede with Soote, or ſteepyng them all a nyght in the iuyce of Houſeleeke: Columella affyrmeth, that he hym ſelfe hath ſeene it prooued.

RIGO. Nowe proceede (I pray you) with your Sommer ſeedes.

CONO. The Sommer ſeedes are almoſt all ſuche as are ripe within three monethes, or foure at the vttermoſt after they are ſowen, and ſome of them ſooner, yf the grounde and the weather be good. Among the ſommer ſeedes we wyl firſt talke of grayne, and after of pulſe. Of the grayne, Oates are the firſt that are ſowed, though Virgil count them barren, and Plinie counteth them rather weedes then Corne, affyrmyng that Barley when it proſpereth not, wyll many tymes turne to Oates: yet the Frenche men and the Germanes count it (at this day) the beſt prouender for Horſes, and foode for Cattell. Plinie alſo witneſſeth, that the Germanes vſed to make pottage of Oates. And Dioſcorides maketh mention of Oaten pottage. πόλτος ἐκ βρώμης γίνεται, pottage or gruell is made of Oates, it is called of the Greekes βρωμος, in Italian Vena, in Spaniſhe Auena, in Frenche Auoyne, in Dutche Hauer, whiche though it growe not commonly in Italy, yet vpon monte Ficelto, and in the kyngdome of Naples about Siponto it is founde. We haue amongſt vs two kyndes of them, one full and weyghty, ſeruing in deere yeeres to make bread and drynke of, ſpecially yf it be medled with a little Barley, and this kind proſpereth in riche and newe broken vp ground exceedingly. The other kinde is lyghter, whiche the common people call Gwen and Brumhauer, it is very lyght, and yeeldeth but little flowre nor foode, it groweth vpon ſandy and barrayne groundes, and ſer-

Oates.

ueth

ueth well for Cattell and for Horſe, both the kyndes haue buſſhy toppes, from whence hangeth the ſeede in lykewyſe, reſembling the Graſſehopper: the flowre of it is white, and from one grayne, there ſpringeth diuers ſtalkes. With Dioſcorides, Bromos is a kynd of Oates that reſembleth Wheate in the ſtalke and the blade, and groweth like wylde Wheate. Theophraſtus calleth it αἰγίλοπα The Date is not daungerous in the choyſe of his grounde, but groweth lyke a good fellowe in euery place, where no ſeede els wyll growe. Of the lyke diſpoſition almoſt is Buck or Beeche wheate, vnknowen to our olde fathers. It is called φαγόπυρον, Beechewheate or μελάμπυρον Blackwheate, though μελάμυρον ſignifieth an other grayne. I had rather call it Beechwheate, becauſe the grayne thereof is threecorned, not vnlyke the Beechemaſt both in colour and fourme, differing onely in the ſmaleneſſe. The ſtalke is very great, and ſtraked like to the greater Fearne: It hath many branches with a buſhy toppe, a great ſort of white flowres in a knop, lyke the flowres of Elder: it flowreth long together, and after appeareth the grayne, fyrſt white and greeniſhe, in ſhape threecornerd: after they be ripe the colour chaungeth to blacke or browniſhe like a Cheſtnutte. This grayne hath not long ſince ben brought from Ruſſia & the Northerne partes into Germanie: nowe is it become common, and vſed for fatting of Hogges, and ſerueth the common people in deare ſeaſons to make bread & drinke withal, it may be ſowed in any ground how badde ſo euer it be: howbeit, it dooth beſt in good grounde, and is ſowen in Apryl and May, and in June, after the reaping of Rape ſeede. You muſt ſowe leſſe of it vppon an acre by a fourth part then of Wheate or Rye: it is much vſed to be ſowed vpon the ground where Rapes growe, wherby the ground dooth yeelde a double Croppe in one yeere. When it is ſowen, it commeth vp, yf it be moyſt weather, within foure or fiue dayes after, hauyng two leaues at ỹ fyrſt appearing, not much vnlike to Purcelaine. Amongſt the Sommer ſeedes is alſo receiued Sommer Barley, whiche from the Sonnes entring into the Æquinoctiall, till the end of Marche and Apryl, is ſowen, and is reaped againe for the moſt part in three monethes, or at the vttermoſt foure. It requireth (as Winter Barley dooth) a riche and a mellowe grounde, and

Buck.

Sommer Barley.

and to be sowed after twyse plowing, though sometime for necessitie it is sowed after the fyrst plowyng. And though it yeelde not so good nor so perfect a grayne as the Winter Corne doth, whose grayne as Theophrastus writeth, is farre more perfect and of stronger substaunce, bringing greater strawe and weightier Eares, yet because it is harder husked, and the Sommer seede more fyne and gentle, is therefore of most men desired, and counted to yeelde more flowre then the Winter grayne: some agayne preferre the other Millet, called in Latine Millium, in Greke κεγχρον, in Italian Milio, or Miglio, hauing as it were a thousand graynes in a Eare, as Festus seemeth to auowe, in Spanishe Mijo, in Frenche Millet, and in Dutche Hyers, where they make pottage of it and bread. The Russians and Moscouians are chiefely nourished with this kind of pottage, which they make with the flowre mingled with milke, and the blood that they let from their Horses. The men of Ind, as Plinie sayth, knowe no other grayne but Barley and Millet, which grew in his time plentifullest in Campania, it is the best leauen that may be made, neither is there any grayne comparable to it for weyght, that more increaseth in bakyng: for of one bushell hath been drawen threescore pounde of bread, and a bushell of sodden meate, made of three quarters wet and vnsodde. It is sowed at this day in euery place, though very little in ỳ lowe Countrey, it groweth with a stalke full of ioyntes a cubite high, a leafe like a Reede, a round and a small seede hanging downe in long rimmes with many toppes, it groweth sometime seuen foote hie, it delighteth in a watrishe moorie grounde, and in grauel, so it be nowe and then ouerflowen, it hateth drye and chalkie groundes. Some geue counsell to sowe it fyrst in a colde and a wette ground, and then in a hotte ground: before the Spring you must not sowe it, for it delighteth muche in warmth. A little seede of it, is sufficient for a great deale of ground: yf it be sowed thicke, it comes to nought: a great handfull wyll serue a whole acre, wherefore in raking, you must rake out what is more then needefull: an acre beareth fourtie bushels, yf it be wel sowed, euery seede yeeldeth about a pottell. It is forbidden to be sowen among Vines or fruite trees, and must continually be weeded and raked. When the eare is full growen, it must be gea-

Myllet.

thered

thered with the hande, and dryed in the Sunne, leaſt the whot weather ſhatter the ſeedes. This graine may very long be preſerued, for being well layde vp where the winde can not come, it wyll well laſte an hundred yeere. There is an other like graine that they call Indian Millet, with a great graine, and a blacke and bigge reedy ſtalke, whiche was fyrſt brought into Italy in the raigne of Nero, which (as Plinie ſayth) was called Loba, where as Lobæ are rather the Coddes of all Pulſe, and Phobæ the manes and toppes of Millet, as it appeareth by Theophraſtus. Panicum is called of the Greekes κεγχρος, of the Dutch Pfennich, or Heidengreiſs, of the Italians Pannacho, the Spaniardes Panizo, the Frenchemen Paniz, ſo called of the little Pannicles wherein the ſeede lyeth. It commeth vp like Millet, with many leaues and ſtippes, gluttering with a reddiſhe buſhy toppe, full of ſeedes lyke Muſtard ſeede, ſome yellowe, purple, blacke, and white: it muſt be ordered in all thinges almoſt as Millet: being ſowed in Sommer, it is ripe in fourtie dayes after: in other places ſowed in May in wette grounde, it is to be geathered in September. The haruelt, and the vſe of it, is almoſt all one with Millet, neyther can it as Millet be dreſſed without parching, when it beginnes to ſpindel, it muſt be well weeded, leaſt the weedes outergrowe it: being well dreſſt with Cheeſyl and Milke, it maketh indifferent good meate, in bread it is not ſo much vſed as Millet: for the bread is very drye, and croombleth lyke Sand or Aſhes, being altogeather without moyſture or cleauing: but the common people remedying that with Larde or Oyle, doo make a ſhift with it as wel as they can. They that dwell about Pontus, are ſayde to eſteeme it aboue all other foode, as the people of Nauare doo at this day. In many Countreys it is vſed onely to feede Pigeons withall. Of the number of outlandiſhe graine, is Ryſe, in ſhare as Theophraſtus ſayth, lyke Darnell, hauyng a buſſhy toppe lyke Millet or Pannicle, but no Eare: his graine is lyke the kinde of Barley called Zea, the leaues are thicke lyke leaues of Leekes, but broader, the ſtalke a cubite hie, the floure purple. This graine is but geaſon in Fraunce and Germanie, but in Italy and Lumbardy common, where it is called Elriſo, and Meneſtro Del riſo, the Frenchmen leauyng the fyrſt letter, doo call it Riſon, the Greekes ὀρυζα,

Panicle.

Ryſe.

the Spaniardes call it Arroß, Plinie ſuppoſeth it to be engendred of the water Sedge. There is made of it Furmentie, as Horace calles it Ryſe Furmentie. It is ſowed in March as Millet and Pannicle is. The Indians (they ſay) do bruſe it before they ſowe it, to make it the lighter of digeſtion. And as Strabo reporteth, they make drinke of it.

Seſamum. RIGO. What ſay you to Seſamum, that was greatly in uſe in the olde tyme?

CONO. Seſamum is named with the Greekes σήσαμον, the Italians Seſamo, the Spaniard Aronioli, the Frenchemen Iugiolin. In tymes paſt, it hath been more uſed and greatly commended, both of Columella and Plinie. At this day it is knowen to a very fewe, as a great ſort of ſeedes els are, in ſo muche as the very Corne that we dayly feede of, we ſcarſely knowe what it is. Some reckon it in the number of Grayne, and ſome of Pulſe: the ſtalke thereof is not lyke Millet or Pannicle, full of ioyntes, but playne and ſmoothe lyke a reede, the leaues thereof ruddy, the ſeede white, not ſo bigge as Lineſeede, and is conteined in little knoppes like Poppie: it is ſowen before the ryſing of the Seuen Starres, after the maner of Italy. Columella ſayth, that he hath ſeene it in Cilicia and Syria ſowed in June and July, and reaped in Autume. It requires a mellowe blacke moulde, though it wyll growe vppon good ſandy grounde, and forced ground, rayne is hurtfull vnto it after it is ſowed, where as it dooth good to all other grayne, no great Cattell nor Vermine wyll meddle with it, it hurteth ground very muche, becauſe of the great quantitie and thickneſſe of the ſtalke, and the number of the rootes. Plinie wryteth, that it was brought out of India, and vſed both for meate and oyle. But to returne to ſuch graine as we are acquainted with. Amongſt the Sommer ſeedes is Myſcelyn to be reckoned. The huſbandmen doo ſometime make a medley of ſundry ſortes of ſeedes, and ſowe them partly for Cattell, and partly for hope, that though ſome of them fayle, yet ſome wyll growe. But here muſt you beware, leſt you mingle not Winter Corne and Sommer Corne together, for that were a great ouerſight, and one of them muſt needes periſhe. Some Barley may well be mingled with Oates or Buck, as well for brewing, as for feeding of cattell: and Tares

or

or other lyke Pulse may be myngled with Oates, as very good foode for beastes. They are to be sowed in tyme and place as I haue tolde before, in my seuerall entreatyng of them.

RIGO. You haue well satisfied me for Grayne and Corne, you may nowe (yf it please you) doo as much in Pulse.

CONO. Pulse or Pedware, is called of the Greekes ὄσπρια, the other partes of the fruites of the grounde: of these, there are sundry sortes as you haue seene of Corne: some put Millet, Pannicle, and Sesanum, to this kind, because Columella sometimes puts them in the number of Grayne, and sometime of Pulse: but I folowyng Plinie herein, doo put them amongest the kindes of Grayne, accountyng those to be Pulse, whose seedes are conteyned in coddes, as Beanes, Pease, Lentiles, Tares, Chyches, Fytches, and such lyke, which all are to be sowen in the Spryng. Of all kinde of Pulse, the greatest honour is due to the Beane as Plinie witnesseth, as to a Pulse that is most commodious for man and beast. In Greeke it is called κύαμος, in Italian and Latine Faba, in Spanishe Haua, in Frenche Feue, in Dutche Bonen. This amongest all other Pulse groweth in height without any stay, it hath a thicke leafe, a creasted flowre of diuers colours, spotted white and blacke, whiche Varro calles the lamentable letters, it hath a long Codde, his fruite within broade, lyke the nayle of a man, of diuers colours, it appeareth at the fyrst with many leaues lyke a Pease, and not with one alone lyke Wheate. It is sowed fyrst of all other Pulse in the Spryng tyme as Virgil wyll haue it, and timely, because of Fabalia, whiche is the offall of the Beanes, for both the Coddes and the stalke, is a foode that cattel muche delightes in. Columella reporteth howe he heard a skilfull husband say, that he had rather haue the offall of Beanes timely sowed, then the Croppe of that which is ripe in three monethes, you must sowe them in the encrease of the Moone, and after once plowing. It is sayde, that yf they be enclosed in Goates doung and sowed, they wyll yeelde great encrease, and that the partes that are eaten or gnawne, in the encrease of the Moone wyll fyll vp agayne. If they be sowed neere to the rootes of Trees, they wyll kyll them. Some holde opinion, that yf they be steeped in Capons blood, they wyll be safe from all hurtfull weedes, and

Of Pulse.

Beanes.

that layde in water a day or two before they be sowen, they wyll growe the sooner. The Beane delighteth in riche and wel dounged ground, as all other Pulse dooth: wette and lowe grounde it dooth not refuse, though all the rest desyre drye grounde, it wayeth not weedyng, being able to ouergrowe them. Of all other Pulse it onely springeth with an vpryght stalke full of knottes, and hollowe. And where as all other Pulse are long in flowre, this flowreth longest, flowring fourtie dayes together, one stalke beginning when others end, and not all at one time as Wheate, they codde in sundry dayes, the lowest part of the stalke flowring fyrst, and so vpward styll in order. So fruitefull are they in some places, as you shall finde one stalke to beare a hundred Beanes. The Beanes sticke close to their Coddes, the blacke in theyr toppes, the Latines call Hilum, the Coddes Valuuli, the woormes that breede in them, Midæ. Lomentum is the Meale which the people in olde tyme dyd vse for the smoothing of their skinnes. Fresa Faba was the Beane that was but smally broken, and hulled in the Mylle. Refrina was that whiche they vsed to offer in sacrifyce for good lucke with their Corne. It is good to steepe your Beanes in the water of Saltpeeter, a day before you sowe them, you shall keepe them from Wyuels as (Palladius sayth) yf you gather them in the wane of the Moone, and cherishe them, and lay them vp before the encrease. Beanes, and all other Pulse doo mend the ground that they are sowen in. The next to Beanes in woorthynesse and sowyng is Pease, called in Greeke πίσος, in Italian Pise, and Piselle, in Spanishe Arueja, in Frenche Pese, in Dutch Erwtten, a Pulse that groweth with hollowe stalkes and full of branches lying vpon the grounde, many leaues and long, the Coddes rounde, conteyning in them round seedes and white: though Plinie wryte, that they be cornerd as Chych, of which sort we haue some at this day blewishe, with flowres in shape like the Butterflye, purple coloured toward the middest. There are two sortes of Pease, the one sort coueteth to climbe aloft, and runneth vp vppon stickes, to whiche with little wynders he bindeth hym selfe, and is for the most part onely sowen in Gardens, the other sort groweth lowe, and creepeth vpon the grounde: both kindes are very good to be eaten, specially when they be young and tender,

Pease.

der, they muſt be ſowen in warme groundes, for they can in no wyſe away with colde: they are ſowed eyther vppon fallowes, or rather in riche and yeerely bearing ground once plowed, and as all other Pulſe, in a gentle and a mellowe moulde, the ſeaſon being warme and moyſt. Columella ſayth, that ground is made very riche with them, if they be preſently plowed, and the Culter turne in and couer that whiche the Hooke hath newely left. They are ſowed among Sommer Corne, commonly with the fyrſt. Fyrſt Beanes, Peaſe, and Lentiles, then Tares, and Oates, as is ſayde before. Peaſe and Tares muſt be ſowen in March and Apryll, and in the wane of the Moone, leſt they growe to ranke, and flowre out of order: where as the beſt ſowing for all other Pulſe and grayne, is in ỳ encreaſe of the Moone. There are that count Peaſe to be the Pulſe that the Greekes call ὄροβος, the Latines Eruum, the Italians Eruo, the Spaniardes Yeruo, the Dutchmen Eruen, of which there are two kindes, the one white, the other red. The later is wylde, and groweth in Hedges and Corne feeldes: it is a ſmall plant, hauyng his leaues narrowe and ſclender, his flowre eyther white, or medled with purple, growyng neere together like Peaſe, there is no great buſineſſe about it, it delighteth in a leane barren ground, not moyſt, for it wyll be ſpilt with too muche ranckneſſe: it muſt be ſowed before Marche, with which moneth it agreeth not, becauſe it is then hurtfull vnto cattell. Eruilia is a Pulſe like ſmal Beanes, ſome white, ſome blacke, and others ſpeckled: it hath a ſtalke like Peaſe, and climeth lyke a Hoppe, the Coddes are ſmoothe like Peſcoddes: The leaues longer then the leaues of Beanes: the flowre is a pleaſant foode to Bees. In Fraunce and Lumbardie it is called Dora, or Dorella, Phaſeolus in Latine, in Greeke σμίλαξ κηπαία garden Smalax, ſome call it Faſiolum, and Dolichium, among the Italians ſome call it Fagiuoli, ſome Smilace, de gli Horti, others Fagiuolo, Turcheſes, others Laſanie, the Spaniardes call it Friſoles, the Frenchemen Faſioles, and Fales Pinceos, the Dutchmen Faſelen, or wyld Bonen. It is a kynde of Pulſe, whereof there are white, redde, and yellowe, and ſome ſpecked with blacke ſpottes: the leaues are lyke Iuie leaues, but ſomething tenderer, the ſtalke is ſclender, wyndyng, with claſpes about ſuch plantes as are next hym, runnyng

Frenche Beanes.

vp so hie, as you may make Herbers vnder hym, the coddes are longer then Fennigreeke, the Graynes within diuers coloured and fashioned lyke Kydneys: it prospereth in a fatte and a yeerely bearyng ground, in Gardens, or where you wyll: and because it climeth aloft, there must be set by them poales or staues, from the whiche runnyng to the toppes, it climeth vppon Trees, seruyng well for the shadowyng of Herbers and Summer houses. It is sowen of diuers from the Ides of October to the Kalendes of Nouember in some places, and with vs in Marche. It flowreth in Sommer, the meate of them is but indifferent, the iuyce not very good, the Coddes and the Graynes are eaten togeather, or lyke Sperage. The Iewes sell them at Rome preserued, to be eaten rawe. Lens and Lenticula, in Greeke φακὸς and φακὴ, in Italian Lendi: ix bon mænastre, in Spanishe Lenteza, in Frenche Lentilla, in Duche Linsen, is a Pulse very thicke and bushy, with leaues lyke the Tare, with three or foure very small Graynes in euery Codde, of all Pulses the least, they are soft and flatte. The white ones for theyr pleasauntnesse are the best, and such as are aptest to seethe and consume most water in their boylyng. It is sowen with vs in Germanie in March and in Aprill, the Moone encreasyng, in mellowe ground, being riche and dry: yet Plinie would rather haue the ground leane then riche, and the season dry: it flowreth in July, at whiche tyme by ouer muche rancknesse and moysture, it soone corrupteth. Therefore to cause it quickely to spryng and wel to prosper, it must be mingled with dry doung before it be sowen: and when it hath lyen so mingled foure or fyue dayes, it must be cast into the grounde. It groweth hye (as they say) when it is wette in warme water and Saltpeter before it be sowen, & wyl neuer corrupt being sprinckled with Bengwin and Vineger. Varro wylleth, that you sowe it from the fiue and twentieth day of the Moone to the thirtieth, so shall it be safe from Snayles. And Columella affyrmeth, that yf it be mingled with Asshes, it wyll be safe from all annoyance.

Lyntels.

Chyche. Cicer in Latine, in Greeke ἐρέβινθος, in Italian Ceci, Cicere Rosso, and Cicere bianco, in Spanishe Garuangos, in Frenche Chiche, and in Dutch Cicererbs, is a bushy kynde of Pulse, hauyng a rounde Codde, and therein a couple of thre coorned seedes, whereof there

there are that make three kindes, whyte, read, and blacke, differing onely in the colour of theyr flowre: the best kinde hath a stickie stalke, crooked, little leaues indented, a whyte, a purple, or a blacke flowre. And whereas other Pulse haue their coddes long and brode, according to their seede, this beareth them rounde: it delighteth in a blacke and a riche moulde, is a great spoyler of land, and therefore not good for newe broken vp ground: it may be sowen at any time, in March, in rayny weather, and in very riche ground: the seede must be steeped in water a day before it be sowen, to the end it may spring the sooner: it flowreth in June and July, and then falleth to seede: it flowreth a very long while, and is geathered the fourth day, being rype in a very short tyme: when it is in flowre, of all other Pulse it receyueth harme by rayne: when it is rype it must be geathered out of hande, for it scattereth very soone, and lyeth hid when it is fallen. In the chych there neuer breedeth any worme, contrary to all Pulse else: and because it dryueth away Caterpillers, it is counted good to be set in Gardens. Cicercula in Latine, in Greeke λαθυρος, in Italian Cicerle, in Spanish Cizerche, it differeth from the Chych, only in that it is somewhat blacker, which Plinie accounteth to haue vncauen corners as Pease hath: and in many places about vs, they vse them in steede of Pease, esteeming them farre aboue Pease: for they both yeeld more flowre then Pease, it is lighter of digestion, and not so subiect to wormes. Columella countes it rather in the number of Fodder for cattell, then of Pulse for man: in which number are these that followe. And first Vicia in Latine, in Greeke βικιον, in Dutch VVycken, in Frenche Vesse, so called as Varro thinkes of wynding, because it hath tendrels or claspes as the Vine hath, wherby it clymeth vpon such stalkes as growe next it: it groweth halfe a yarde hie, leaued like Tymare, sauing that they be something narrower, the flowre like the flowre of Pease, hauing little blacke seedes in cods, not altogether rounde, but brode like the Lyntell: it requireth a drye ground, though it wil also grow wel yenough in shadowye places, or in any ground with small labour, being not troublesome to the husbandman: it requireth but once plowing, and looketh for neyther harrowing nor dounging, but enricheth the lande of it selfe, specially if the

Cicercula.

Tares and fodder for Cattel.

grounde be plowed when the crop is of, so that the Stalkes may be turned in: for otherwise the Rootes and Stalkes remayning, doo sucke out the goodnesse of the ground: yet Cato would haue it sowen in grassie ground, not watrishe, and in newe broken vp ground after the deawe be gone, & the moysture dryed vp with the Sunne and the Winde. You must beware that you sowe no more, then you may wel couer the same day: for the least deawe in the world dooth spoyle it. Neither must you sowe them before the Moone be 24. dayes olde, otherwise the Snayle will deuoure it: his tyme of sowing is, as Plinie writeth, at the setting of the Starre called the Berward, that it may serue to feede in December: the second sowing is in Januarie: the last, in March. In Germanie they vse to sowe them in March or Aprill, chiefly for fodder for their cattell. To sowe Tares, and as Plinie sayth Beanes, in not broken vp grounde without losse, is a great peece of husbandry: they flowre in June, at which tyme they are very good to skowre horses: it is good to laye them vp in the codde, and to keepe them to serue Cattell withall. Tares & Dates make a good meslyne sowed together.

Lupines.

Lupinus in Latin, in Greeke θερμὸς ἤμερος, in Italian and French almost as in Latin, in Spanish Altramuz, in Dutch Roomsche Boouen, is a Pulse hauing one onely stalke, the leafe iagged in fiue diuisions like a starre, the flowre white, the coddes iagged, & indented about, hauing within them fiue or sixe seedes hard, brode, & red, the leaues thereof doo fal. This pulse requireth least trouble, and is of smal price, and yet most helpeth the grounde of any thing that is sowen: for there can be no better manuring for barrayne Vineyardes and Corne feeldes then this, which eyther vpon barrayne ground prospereth, or kept in the Garner, endureth a wonderfull whyle: being sodden and layd in water, it feedeth Oxen in Winter very well, and in tyme of dearth (as Columella sayth) serueth men to asswage their hunger: it prospereth in sandy and gravelly groundes, in the worst land that may be: neyther loueth it to haue any labour bestowed vpon it, nor weyeth the goodnesse of the ground. So fruitfull it is, as if it be cast among Bushes and Bryers, yet will it roote and prosper: it refuseth both Harrowing and Raking, & is not anoyed with Weedes, but killeth

the

the weedes about it. If doung be wanteyng to mende the ground withall, this serues the turne aboue all other: for being sowed and turned in with the Plowe, it serueth the turne in steede of dounging: it is sowed timeliest of all other, and reaped last: it is sowed before all other Pulse, a little after Haruest: couer it how slenderly you wyll, it careth not, an excellent good seede for an euyll husbande: yet desyreth it the warmth of Autume, that it may be well rooted before Winter come, for otherwyse the colde is hurtfull vnto it. It flowreth thryse, fyrst in May, then agayne in June, and last in July: after euery flowryng it beareth his codde. Before it flowreth, they vse to put in Cattel: for where as they wyll feede vpon all other grasse or weedes, onely this for the bitternesse thereof whyle it is greene, they leaue vntouched. Being dryed, it serueth for sustenaunce both of man and beast: to cattel it is geuen medled with Chaffe, and for bread for mans vse: it is mingled with Wheate flowre, or Barley flowre: it is good to keepe it in a smokie loaft, for yf it lye moyst, it is eaten of little woormes and spoyled. The leafe keepeth course and turneth with the Sunne, whereby it sheweth to the husbande, euen in cloudie weather, what time of the day it is. Fenũ grecum in Latine, Fenugreeke. in Greeke with Theophrastus and others βούκερον ἢ τύλη, with Dioscorides καρπὸς and αἰγόκερως, of others κεραίτης, in Frenche Fenegres, and Fenigrent in Italian, Fænigræco in Spanishe, Alholuas in Dutche, sometime by the Latine name, and commonly Kohorne and Lockshorne, commeth vp with a small stalke, the leafe lyke a Threeleaued grasse, it is sowed well in a slender barrayne ground, you must take heede you plowe it thicke, and not very deepe: for yf the seede be couered aboue foure fyngers thicke, it wyll very hardly growe. Therefore the grounde must be tyld with small Plowes, and the seede presently couered with Rakes. There are two sortes of it, the one called of the common people Siliqua or code, whiche they sowe for fodder in September, the other in Januarie, or the begynnyng of Februarie: when they sowe it for seede, it flowreth in June and July, when also it beareth his codde, but the seede is not ripe till August: it is vsed to be eaten after the order of Lupines, with vineger, water and salt, some put to a little oyle: it is vsed both for fodder,

and diuers other vses. Furthermore, of Pulse called of Gellius Legamenta we haue these generall rules, that they al beare coddes, and haue single rootes euery one; except the Beane, the Chich growyng deepest. The stalke of the Beane and the Lupine is also single, the others are all full of branches and slender slippes, and all hollowe. All Pulse for the most part are to be sowed in the Spring and require very riche ground, except the Lupine, that cares not where he lyes: they are all sowen in the encrease of the Moone, except Peale: yf they be watred before their sowing, they prosper the better: they are speedily to be geathered when they be ripe, for they suddaynely shatter: they wyll endure longest, being geathered in the change of the Moone. It is much to be regarded whether you wyl keepe or sell them, for the seedes in the encrease of the Moone doo ware greater, there are that preserue them in earthen vesselles, strawyng asshes vnder them, and sprinckling them with Vineger: some vse asshes alone, other some vse to sprinckle them with Bergewine vineger, as I haue saide of the Lentyll. Moreouer, the Greekes haue wylled to mingle with the doung a little Saltpeter when you sowe them, whereby they shall the better seethe and be the tenderer: and yf they be not presently tender, they wyll to cast into the pot a little Mustard seede, whiche wyll make them straightway well. Theophrastus addeth diuers thinges beside, whiche were to long to tell.

RIGO. Is it needefull for euery husbandman to sowe all these Grayne and Pulse in his ground?

CONO. No, but as I saide before, in speaking of grounde and seede, you must cheefely sowe suche as best agree with the nature of your grounde: howe be it, there are some of them that refuse no grounde. There are certayne of them as Varro sayth, that are not sowed for present necessitie, but for other afterturnes. And others agayne that are of necessitie to be sowen, as Corne for man, and Fodder for cattell: of whiche must speciall care be had, that there be no want of them, without which we can not liue: as Rye, Otes, and Buck. Lupines and certayne Pulse els for fodder, refuse no grounde, though it be neuer so barren.

Fodder for Cattell.

Besides, when as the husband must not onely haue a care of prouiding such as serue for the sustenaunce of man, but also for suche as

as serue for the feeding of poore cattell, without whiche the grounde can not be hul banded: therefore must he sowe Pulse for the vse of man and beast, and fodder in more abundance for the sustenaunce of beastes. Amongst all sortes of fodder, that is counted for the cheefe and the best, which the people of olde time, and the Italians at this day call Medica, some call it Treefoyle, the Frenche men cal it Grand trefle, the Spaniardes Alfalfa, others call it Burgandie grasse, because it was brought in by the Burgundians, it is nowe also come into Germanie, and there called Welsholken, in Greeke μηδικη. Plinie writeth, that it was brought by the Romanes out of Media into Italy, differing almost nothing from Trifolly or Threeleaued grasse: but that it is greater, higher, and rancker, for in stalke, leafe, and flowre, it is all one, it groweth altogether bushing in leaues. In the toppe of the stalke it putteth foorth short coddes, writhen lyke hornes indented about, and hauing as it were little prickles, wherein is the seede shaped like a Moone, and growyng to the codde in bignesse as the Lentyl: which being chawed, tasteth like Pease: euery codde hath his seede, it requireth a fatte grounde without stones, full of iuyce and riche: in many places it commeth not vp, in others it springeth very thicke. Varro geueth charge, that it be not sowed in too dry a grounde or tyckle, but in good and well seasoned. Plinie would haue the grounde be dry and very riche. Columella biddeth, that the feelde where this Medica shalbe sowed, should be broken vp about October, and so to lye mellowyng al the Winter, and then to stirre it in Februarie, and the stones cast out, to harrowe it well, and after in Marche to order it garden wyse, castyng it into beddes, euery bedde ten foote broade, and fyftie in length, so that they may be easily watred, and of euery side well weeded: then laying on good olde doung, let it lye tyll Apryl, and at the ende of April sowe it in such proportion, as euery handful of seede may occupie fyue foote in breadth, and ten in length: and couer the seede out of hand, raking them with woodden Rakes, for the Sunne wyl soone burne them. After it is sowen, that it come vp an inche in heyght, you must beware you touche not the grounde with any iron instrument, but eyther with your fyngers, or with Rakes of wood, weede Medica

weede it well from all other noysome thinges, otherwyse it wyll growe wylde and turne to pasture. Let the fyrst haruest be long deferred, to the ende he may somewhat shed his seedes: at other tymes you may mowe it as soone as you wyl, and geue it to your cattell. Suche as are skilfull in husbandry, doo say, that yf you mingle Otes with the seede of Medica, and sowe them, they wyll cause them to stocke very well: it is sowed in Aprill or later, in May, to scape the frostes, and the seede is cast in lyke sort as Wheate is. When it beginneth to branche, al other weedes must be weeded away: and being this ordred, you may mowe it sixe tymes a yeere. It flowreth sixe times, or at the least fiue times, so it be not cut. When you haue mowed it, water it well, and as it springeth, weede it agayne. And thus as I sayde, you may mowe it sixe times a yeere, and it shall thus continue ten yeeres togeather: it enricheth the ground, all poore and feeble cattel, are soone brought vp with it: it likewyse healeth cattell that are diseased: but when it fyrst springeth, tyl cattell be acquainted with it, you must geue them but little at once, lest the strangenesse of the foode hurt them: for it maketh them to swell, and breedeth great abundance of blood. Columella wryteth, that one acre of it wyll well fynde three Horses a yeere. In some Countreyes this herbe dooth growe in great plentie in euery Meddowe, eyther of the nature of the grounde, or through the disposition of the heauens, and sometime the relikes of that whiche hath been long agoe sowen, dooth yeerely spring of the seede that falleth, and ouergrowen with grasse & weedes, dooth change into meddowe. I see no cause but that it may growe of it selfe, but that perhaps suche plantes as are brought out of strange Countreys requyre sowyng and dressing: it is best to be mowed when it beginneth to flowre, for it must not be suffered to seede, whereby the fodder shall be the better: whiche being well layde vp, wyll continue in goodnesse three yeeres, to the great profite of the Grasier, for as I haue sayde before, there can be no better fodder deuised for cattell, wherewith they wyll better feede, and sooner ryse. The next in goodnesse to this Medica is Cytisus, woonderfully as Plinie wryteth commended of Aristomachus, and as Vergil sayth, a good fodder for Sheepe, and beyng drye, a delightfull foode to Swyne:

Cytisus.

it may be mooued ſundry times in the yeere, to the great commoditie of the huſband: a little whereof dooth ſoone fatte vp cattell, neither is there any other graſſe that yeeldeth eyther more abundance or better mylke, the moſt ſoueraine medicine for the ſickneſſe of catteil that may be: beſide, the Philoſophers promiſe, that Bees wyll neuer fayle that haue this graſſe growyng neare them: therefore it is neceſſarie to haue your grounde ſtored with it, as the thing that beſt ſerueth for Poultrie and Cattell: the leaues and ſeedes are to be geuen to leane and drouping Pullen: ſome call it Telinen, ſome Trefoyle, ſome great Melilot, the Romanes call it Trifolu maius, great Traſſe, it is a plant al hearie and whytiſhe, as Rhamnus is, hauing branches halfe a yarde long and more, whereupon groweth leaues lyke vnto Fenygreeke or Clauer, but ſomething leſſe, haupng a ryſyng creſt in the middeſt of them. This plant was fyrſt founde in the Ilande Cythno, and from thence ſpread throughout the Cyclads, and ſo to Greece, wherby the ſtore of Cheeſe came to be great: neyther is there any Countrey at this day, where they may not haue great plentie (as Columella ſayth) of this ſhrubbe. In Italy it groweth about the encloſyars of Uineyardes, it ſhrinketh neyther for heate, colde, froſt, nor ſnowe: it requireth good grounde, yf the weather be very drye, it muſt be watred, and when it fyrſt ſpringes well harrowed after three yeeres, you may cut it downe and geue it your cattell. Varro woulde haue it ſowen in well ordred ground, as the ſeede of Colwoortes ſhould be, and after remooued and ſet a foote and a halfe a ſunder, or els to be ſet of the ſlippes. The tyme of ſowyng of Cytiſus is eyther in Autume, or in the ſpryng, in ground well plowed and layde out in beddes: yf you want the ſeede, you may take the ſlippe, ſo that you ſet them foure foote a ſunder, and a bancke caſt about them with earth well dounged: you may alſo ſet them before September, when they wyll very well growe and abyde the colde in Winter: it laſteth but three yeere. Columella hath two kindes of Cytiſus, one wylde, the other of the Garden. The wylde dooth with his claſpers feede very well: it wyndeth about, and killes his neighbours as the Iuie dooth: it is founde in Cornefeeldes, ſpecially amongſt Barley, the flowre thereof is lyke the flowre of Peaſe, the leafe yf it be bruyſed, ſmelleth

let: like Rocket, and being champed in the mouth, it taſteth like Chyche, or Peaſe. There is an other kinde of fodder among the plantes, vnknowen to ỳ old wryters, very good to feede both cattel & Poultrye. I know not whether it be knowen in other Countreys beſide Germanie, the common people call it Spury, or Sperie: it hath a ſtalke a foote in height or more, buſſhed forth in many branches, it hath a whyte flowre without any leafe: the flowre endeth in little knoppes as Flaxe hath, conteynyng in them a very little ſeede like Rape ſeede. They are much deceiued that take it for Cytiſus, when that (as Dioſcorides ſayth) hath leaues like Fenugreeke, and this is altogeather without leaues: neither is the ſeede any thing like, though the vſe be almoſt one. The beſt Milke and Butter in Germanie, commeth of this feeding: wherefore it is eſteemed almoſt as good as Barley, or other grayne: the ſtrawe is better then any Heye: the Chaffe feedeth as well as any Graynes: the ſeede feedeth Pigeons and Poultrie in Winter paſſing well: it is ſowed in ſandie and light groundes all the Sommer long, and ſome ſowe it in Spring time with Oates for the ſeede ſake: in Autume and Harueſt time it is ſowed to feede Cattell: it is profitable for huſbandes that dwell in ſandy and grauelly Countreys, wherefore they ſhoulde neuer be without good ſtore of it, for Hennes, Bees, Goates, Sheepe, Oxen, and all kinde of Cattell delight very muche in it: nowe remayneth the ſowyng of Flaxe and Hempe.

Sperie.

RIGO. I looke for it.

CONO. Theſe, although they be not to be receiued in the number of Corne nor Pulſe, Fodder nor Hearbes, yet is there great account to be made of them with ỳ huſbandmans thinges, without whiche no houſe can be furniſhed, nor man wel apparelled: whiche being beaten to a ſoftneſſe, ſerueth for webbes of Linnen, and twyſting of Cordes: and more, of this ſo little a ſeede dooth ſpring that, which (as Plinie ſayth) carrieth the whole worlde hether and thether, that bryngeth Egypt to Italy, and carryeth vs from Cales to Oſtia in ſeuen dayes. Linum in Latine, in Greeke λινον, in Italian and Spaniſhe Lino, in French Dulin, in Dutch almoſt like, ſauing that they call the ſeede Lyn and the plant Flaxe, is a very common hearbe, wherewith women

Flaxe.

arg

are set a wooꝛke: it hath a sclender stalke, not muche vnlike to Sperie, but that it groweth higher a litle, & bigger, with narrow leaues, & long blewe flowꝛes in the top, which falling away, leaueth behinde them little round knoppes as bigge as a Pease, wherin are enclosed yellowe seedes: it delighteth in rich ground and somewhat moyst, some sowe it in barrayne grounde: after once plowyng, it is sowed in the Spꝛing, and geathered in sommer. In Gelderland and Gulicke, where there is great stoꝛe of it, they sowe it about the beginnyng of May: there are agayne that obserue thꝛee seasons foꝛ the sowyng of it, as the weather shall fall out, foꝛ it requireth rayne and moysture: the ripenesse of it, is perceiued by the waxing yellowe, and swelling of the knoppes that holde the seede, being then plucked vp and made in little bundels, it is dꝛyed in the Sunne, the rootes standyng vpwarde that the seede may fall out. Some vse agayne to carde of the knoppes with an iron Combe, and dꝛying them in the Sunne to geather the seede. The bundels afterwardes are layde in water heated with the Sunne, with some wayght vppon them to keepe them downe: the rynde waxing loose, sheweth when they haue been steeped ynough. Then the bundels vnlooſed and dꝛyed in the Sunne, are beaten with beetelles, when as the vtter rynde is pilled of, and combed and hacked vpon an iron combe: the moꝛe wꝛong it suffereth, the better doth it pꝛoue: the Towe is seuered from the Flaxe, and appoynted foꝛ his vse, so are they seuerally spon vpon the Distaffe, made vp in bottomes, and sent to the Weauers, whereof are wouen webbes, to the great commoditie of al men. Last of all, the webbe is layde out in the hotte Sunne, and spꝛinckled with water, whereby it is bꝛought to a passing whitenesse. It may be remembꝛed, that not long since the women of Germanie knewe no costlyer attyꝛe. The best Flaxe that is at this day, is bꝛought from Moscouia, Liuonia, and those Countreys, farre excelling ours in heyght and goodnesse. Except there be great encrease of it, & pꝛice in the Countrey where you dwel, Columella would not haue you meddle with the sowing of it, foꝛ it is most hurtfull to the ground, as Virgil hath noted.

Flaxe, vvhere he grovves dooth burne the feelde,
The lyke dooth Oates and Poppey yeelde.

And

And therefore (but that women muſt haue ſomething to occupie theyr handes withall) it were more profite to ſowe the grounde with corne, and to bye linnen abrode, eſpecially yf you way the hurt of your grounde, and the charges of the makyng. Hempe, in Latine Canubis, in Greeke κάνναβις ἥμερος, in Italian Canabe, in Spaniſhe Cannamo, in Frenche Chanura, and in Dutch Haueph, is a plant of the Reediſhe kinde, hauing a very ſtrong ſauour: it groweth with a ſingle ſtalke, and many times to ſuche a heyght, that it matcheth with indifferent Trees: it is of great neceſſitie for the vſe of man, and ſerueth both for makyng of Canuiſſe, and framing of Ropes: the ſtalke hath many knottes, out of whiche proceedeth branches with narrowe leaues indented and ſharpe. Hempe. Dioſcorides deſcribeth both the wylde Hempe, and the Garden Hempe to haue leaues lyke the Aſhe, hollowe ſtalkes, a ſtinkyng ſauour, and rounde ſeede. There are two kindes of it, the Male, that is without floure, and beareth a ſeede of ſundry colours: and the Female, that, to recompence her barrennelſe, dooth yeelde a white flowre: it is ſowed in Gardens, Orchardes, or other good grounde (as Plinie would haue it) after a Southweſt wind: with vs it is ſowen in the ende of Aprill, for it can not away with cold: ſome ſowe it at the ryſing of the ſtarre called the Berward, which is at the ende of Februarie, or the beginning of March: it loueth ritche grounde well dounged and watred, and deepe plowed: it is noughty ſowing of it in raynie weather, the thicker you ſowe it, the tenderer it wyll be, and therefore many times it is ſowen thryſe, though ſome there be that appoynt to euery foote ſquare ſixe ſeedes. The Female or fyrſt pulled vp, afterward the Male, or the Carle, when his ſeede is ripe, is plucked vp, and made vp in bundels, layde in the Sunne for three or foure dayes, and after is caſt into the water, with weyght layd vpon him for eyght or tenne dayes, tyll he be ſufficiently watred, and as Flaxe, tyll the Rynde ware looſe: then taken out, it is dryed with the Sunne, and after broken in the Brake, and then combed and hacked for Yarne and Ropes. Of Hempe, are made Cables, Cordes, Nettes, and Sayles for Shippes, garmentes for Labourers, Shertes, and Sheetes: the Shales or Stalkes ſerue for the heating of Ouens, or kyndeling of Fyres.

RIGO.

RIGO. In the Countrey of Gulicke, and some partes of Fraunce, I remember I haue seene an hearbe planted of the common people with great diligence, that serueth as they sayd for Dyars.

CONO. You say true, that hearbe Cesar in his Comentaries of the warres of Fraunce, calleth Glastum, in Greeke ἰσατις ἡμερὸς, in Italian Gnado, in Spanishe Pastel, in Frenche with the common sort Guadum, and Guesde, in Dutch VVeyt, the Dyars doo vse it, and with them it is greatly esteemed, and great gayne aryseth thereof vnto the people of Gelderland, Iulyes, and Turyn, and diuers Countreys els: the leaues as Plinie wryteth, are lyke vnto Dock leaues. Dioscorides wryteth of two kindes, the wyld, and the Garden Woade, saying, that the Garden Woade whiche Dyars vse, hath leaues lyke Plantayne, but something thicker, and the wylde, leaues lyke Lentyll, with yellowe flowres: with this hearbe Cesar sayth the people of Englande were woont to paynt theyr faces and bodyes, to seeme more terrible to theyr enimies: it requireth lyke sowyng and soyle as Wheate dooth: but it is a great soker of the grounde, and muche hurteth it: it woulde haue a very riche and a fatte grounde, and well dygged: for the grounde were better to be turned vp with Spades then with Plowes for the sowyng of this Plant, and it must be very well weeded. It is sowed in Gelderland in Aprill, and after the common peoples rule, in Easter weeke: at the first fallowing they marle the grounde, after sowe it: you must be very heedefull in the weedyng of it. When it is growen a handfull hye and more, they suffer it not to flowre, but with an instrument for the purpose, they cut it close by the roote, washe it, and carry it to the Pyll, and suffering it to growe agayne, they cut it three or foure times, and so leaue it to seede. The greene hearbe they grinde in Milles like Apple Milles, pressing it, til they get out al the iuyce thereof, then roule they it vp with their handes in rounde balles, and so laye it vpon boorded floores to be dryed. VVoade.

RIGO. You haue greatly delighted me, in describing vnto me the order of sowyng of seedes, without whiche, not onely the people of the Countrey, but also the Courtiar and Citizen are not able to liue: my desyre is nowe to vnderstande the order of Harueſt,

neſt, the Countrey mans long looked for tyme, and the reward of all his toyle.

Haruest. CONO. I wyl proceede in the accompliſhing of your requeſt. When the Corne is ripe, before it be ſcorched with the great heate of the Sunne (whiche is moſt extreame at the ryſyng of the leſſer Dogge) it is to be cut downe out of hande: for delay herein is daungerous. Fyrſt, becauſe that birdes, and other vermine wyll deuoure it: and agayne, both the Grayne and the Eare, the toppe and the ſtrawe being brittell and ouer drye, wyl ſoone fall to the ground: yf ſtorme or tempeſt chaunce to aryſe, the greateſt part thereof wyll to the grounde, and therefore it muſt not be lingred, but when it dooth looke yellowe in euery place, and before that the Grayne be thorowe hard, when they come to looke reddiſhe, you muſt then haue it in, that it may rather ware in the Barne then in the Feelde. Experience teacheth, that yf it be cutte downe in due time, the ſeede wyll growe in fulneſſe as it lyeth in the Barne: for the Moone encreaſyng, the Corne growes greater: at the chaunge, you muſt geather ſuch ſeede, as you woulde ſhould be leaſt fautie. Varro ſayth, that the beſt tyme for Haruеſt, is betwirt the Sunneſtay, and the Dogge dayes: for the Corne they ſay, dooth lye in the blade .xv. dayes, flowreth .xv. dayes, and ripeth in .xv. dayes. Amongſt Grayne & Pulſe, the fyrſt that is to be geathered, is Rape ſeede. And becauſe the ſeede, when the cod beginneth to ware yellowe, declareth ripeneſſe, it muſt be geathered out of hand: and ſythe the ſeede wyll eaſyly ſkatter, it muſt be layde eyther in playne ſmoothe places in the Feelde, or vpon Canuaſſe: and yf it be preſently to be carryed, the Wayne or Cart muſt be lyned with ſheetes, leſt with iogging and tottring of the carryage, the ſeede fall thorowe. You muſt take good heede as well here, as in all other Pulſe, that you preuent the rayne, for the rayne falling, the coddes doo open. As ſoone as your Rape ſeede is of, yf the grounde be plowed, you may ſowe Bucke, or Branke as they call it: ſo that of one peece of ground in one yeere, you may make two haruеſtes. Next vnto Rape haruеſt in theſe Countreys, followeth the haruеſt of Winter Barley, whiche is to be diſpatched before the ſeede (the Eare being ouer dryed) doo fall, for they

Rape haruеſt.

Haruеſt for VVinter Barley.

haue

haue not huſkes to conteyne them as Wheate hath, & the Eares being brittel, wyll ſoone fall: yet ſome thinke it beſt to let the Barley lye a whyle in the Feelde, whereby they thinke the Grayne wyll waxe the greater. Then foloweth the Hempe harueſt. But fyrſt (as I ſayde before) the Fymble or the Female, is pulled, and is dryed a whyle in the Sunne, then (bounde vp in bundels) it is throwen into the water, and kept downe with ſome weyght, that it ſwimme not aboue. After lykewyſe the Male, the ſeede declaryng his ripeneſſe is pulde vp, and the ſeede beyng threaſhed out, it is caſt into the water, tyll the ſtalke be ſofte: after, beyng dryed in the Sunne, it is made vp in bundels to be knockt and ſhaled in Winter euenynges. Rye is to be mowed in June or July, and after that, Wheate. No better rule, then before the Grayne be hard, and when it hath changed colour. An olde Prouerbe (as Plinie ſayth) it is better to haue in harueſt two dayes to ſoone, then three dayes to late. In Rye there is not ſuche feare in ſcattering as in Wheate, whiche as ſoone as it is ripe, wyll ſhedde with euery wynde. Wherefore good heede muſt be taken, that you linger not with Wheate after it is ripe: although Plinie affyrmeth, that Wheate wyll haue greater peelde when it ſtandes long: but ſurely deferring of it is daungerous, as well for the deuouryng of Byrdes and Vermine, as for ſhattring and fallyng of the ſeede through ſtorme and weather: as the proofe was ſeene in the great wyndes that were in the yeere of our redemption. 1567. Then foloweth the harueſt of Peaſe, Beanes, Tares, and Lentyles, accordyng as they are tymely ſowed, wherein you muſt take heede, as I warned you before in Rape ſeede, that they lye not abrode in the rayne: for yf they doo, they wyll open and looſe their ſeede. Laſt of all, commeth the harueſt of the other ſommer ſeedes, as of Barley, Pannicle, Hyllet, and Oates. It is founde by experience, that rayne is good for Oates after they be downe: for it cauſeth them to ſwell and to be fuller, and to that ende they are left in the Feelde many times two or three weekes after they be downe.

Hempe harueſt.

Rye and Wheate harueſt.

The harueſt of all other Corne and Pulſe.

RIGO. What order haue you in your reaping?

CONO. There are diuers ſortes of reaping, accordyng to the maner of euery Countrey. Some with Sythes, which differ alſo

Diuers ſorts of reapyng.

as the woorke requires. In this Countrey we vse three sortes of Corne Sythes, for eyther we haue a Sythe like a Syckle, which holden in the ryght hande, they cutte the strawe close by the grounde, and haue in the leaft hande a long hooke, wherewith they pull togeather that, that they haue cut, and laye it in heapes: and in this sort Wheate and Rye, and suche Grayne as hath the sturdiest strawe, is reaped. In other places, as in Iulis, where the grounde being very ritche, the Corne groweth higher and rancker, there they holde their leaft hande full of Corne, and with the ryght hand with toothed Syckles they cut it, leauing the strawe vnder their handes long, to helpe the grounde withall. In other places they vse a greater Sythe with a long Swath, and fenced with a crooked frame of stickes, wherwith with both their hands they cut downe the Corne, and laye it in Swathes as they doo Grasse when they mowe it, and with that they mowe the higher sortes of Corne. Varro, and Columella, and other, doo tell of sundry other sortes of reaping. Palladius teacheth, beside the labour of men, a shorter way to be doone with an Ore, that shall in short tyme cut downe all that groweth, whiche was woont to be vsed in Fraunce. The deuise was, a lowe kinde of Carre with a couple of wheeles, and the Frunt armed with sharpe Syckles, whiche forced by the beast through the Corne, did cut downe al before it. This tricke might be vsed in leuell and champion Countreys: but with vs it would make but ilfauoured woorke. In reapyng, you must regarde to goe with the wynde: for yf you woorke agaynst the wynde, it wylbe hurtfull as (Xenophon sayth) both to your eyes and your handes. If the strawe be but short, you must goe neerer the grounde: yf it be long, you may put your Syckles to the middest to dispatche it the sooner, and to make it threshe the better: and the stubble vpon the grounde must eyther, according to Virgils rule be burnt, or rotte vppon the grounde for the bettryng of the land. Some preserue that whiche is longest, to thatche Barnes, Stables, and Countrey Cottages withall. And where Hay is scant, it serueth for foddring of Cattell: for Barley strawe is a foode that Bullockes laue wel, and beside, al kinde of strawe, is good to litter withall. When the Corne is downe, it is presently to be bounde in sheaues: although Barley,

Oates,

Oates, and other Corne and Pulse is made vp in Coppes and Rickes, but not without hurt and hazarde. The Corne beyng cut, is not to be had into the Barne presently, but to be let drye, accordyng to the nature of euery Grayne and Pulse: for yf it be carryed in before it be throughe drye, it corrupteth and rotteth. Oates and Buck, are longest left abroade, as also Lentyles, Pease, and Pulse: because they are longest in dryyng. Wheate may soonest be carryed, yf it be not mingled with too many weedes, that hynder the dryyng of it. When haruest is in, the grounde must out of hand be plowed, both to kyll the weedes, and to make it the meeter for the next sowyng. The Corne cutte downe and drye, is to be layde eyther in Barnes, Houels, or Stacks, and after in Winter to be trode out with beastes, or thrashed out with Flayles, and to be clensed with Fannes. Plowyng after Haruest.

RIGO. In Italy they vse to treade out their Corne with Cattell, the lyke reporteth Xenophon of the Greekes.

CONO. I haue seene it mee selfe, where they rather take Hoyse then Oxen, and that time they also wynnowe their Corne, thinking the Southwest wynde to be best for that purpose: but to stay for that, Columella thinketh but the part of a smal husband.

RIGO. I see you haue very large Barnes, what order obserue you in the building of them?

CONO. You must so set your Barne, that the Corne may be well brought into it, and see it be very close on euery side, leauing open a space for twoo doores, a fore doore and a backe doore, but so, as neyther of them open to the West, but rather North and East, and at both sides of the floore bestowe your Corne in seuerall talles and moowes, so that you may easyly come to euery one at your pleasure. And though the Corne be laide vpon Battes in the floores, yet let there be a space left in the middest, that may be open to the very toppe, that you may fetche what sort you list to be thrashed. In some places they haue a Pully in the middest, wherewith they hoyse vp the Corne to the very Rafters of the house. In Holland they haue fewe close Barnes, but all houels and stackes, so placed with hanging rooffes vppon postes, that with pinnes and wynches, they may heyghten it, or let it downe as they list. The Barne.

RIGO. Those kynde of Barnes they say, are not so subiect to Mise and Ratles, nor so chargeable as the other.

CONO. Howe so euer the Barne be, you must place it as hie as you may, least ỹ Corne be spoyled with moysture or dampes. Some thinke it better for them to be thatched then tiled: the largenesse must be according to ỹ greatnesse of your occupying. Some to the ende Cattes and Weesels may the better come by, they doo vaute the flooze with Bzyckes, and laying rafters thereon, doo lay on their Corne. The flooze must be fayze and smoothe made, so as the Corne may be well threalshed or troden out. Columella woulde haue the flooze faire paued with Flint or Stone, whereby the Corne wyll the sooner be threalshed, and the flooze not hurt with beatyng and trampling of Oxen: and when it is fande or wynnowed, it wyll not be full of grauell and durt, as the earthen floozes yeelde. But we content our selues with our earthen floozes, wel made and of good earth, mixed with a little Chaffe, and the groundes of oyle: for this preserueth the Corne from Mise and Emets. You must make it very eeuen and leauel, and after it is mingled with Chaffe, let it be wel troden, & so suffered to dzye. You must keepe also from it Beastes and Poultry, whiche with tramplyng and skraping wyll make it rugged and vneuen. When the flooze is dzye, the Corne layde on it, is beaten out with Flayles & cleaned with Fannes, though in some place they rather lyke to tread it out with Oxen, and to wynnowe it after the olde fashion with the winde.

RIGO. Well syz, when you haue thus threalshed your Corne, what wayes haue you to keepe it from Wyuels?

Garners. CONO. The Garners, or Corne lostes, wherein your Corne thus threalshed and cleansed shalbe layde, must stande hye, that they may be blowen thzough with the Easterne and Northerne windes, to whiche no moysture from the places adioynyng must be suffered to come: for ỹ quarters of the Heauen that are coldest and dzyest, doo both preserue Corne the longest. In Spayne and Apulia beyng hotte Countreys, the wynde is not onely let in on the sydes by wyndowes, but also at the bottome by grates. Some agayne preserues it in vautes vnder the grounde, where the dzye earth dooth cherishe such fruites as she hath bzought foozth, vsed

as

as Varro sayth, in Spayne and Garthage: and in our dayes we vse to keepe both Wine and Grayne in suche vaultes. In Countreys that are very wette and watrishe, it is better to make them in Garrettes as hie as may be, hauing good regarde that it be well walled and floored. Moreouer, where as Corne is subiect to Wyuels and Uermine, except it be very safely laide vp, it wyll soone be consumed: therefore you must make with Clay mingled in steade of strawe with heare, then ouercast it within and without with white Potters Claye, last of all, steepe the rootes and leaues of wylde Cucumbers in water two dayes, and with that water, and Lime, and Sand, make plaister, and washe therewithall the walles within: albeit Plinie countes Lyme as hurtfull a thing as may be for Corne. Some mingle with Lyme the vryne of Cattell, as a thing that wyll destroy Wyuels, or the leaues of Houseleeke, of Wormewood, or Hoppes: but specially yf you haue it, there is nothing so good to destroy all suche Uermine, as the dregges and bottome of Oyle: some vse in the steade therof, the pickle of Herringes. Hauing in this sort ordered their seelinges, & their floores being dry, they suppose that no hurtful woorme shal annoy what so euer Corne they lay in them. Some lay vnder their Corne, Fleewoort: others thinke it an assured remedie, yf they be often fanned & wynnowed, and thereby cooled: but Columella thinkes it vntrue, and that by this meanes the vermine shall not onely be not driuen out, but they shalbe dispearsed throughout all the Corne, whiche yf they otherwyse be left alone, wyll meddle with no more then the outward partes, for a handbredth depth within, there neuer breedes any Wyuels: and therefore he thinkes it better to let that alone that is alredy corrupted, and wyll goe no further, then with farther medling to marre all: for it is an easie matter when so euer ye neede to occupie it, to take away that is taynted, and to vse the rest. But for al this, experience teacheth vs, that there is no so good a remedie to destroy the Wyuel, as is the often fannyng and wynnowing in Sommer. After the first two yeeres, they holde opinion they wil not meddle with Corne: but I weerie you with carrying you to muche about, and yf it please you, we wyll returne home.

Against breedyng of VVyuels.

RIGO. If it be for your ease so to doo: otherwyse there can be

no greater pleasure to me, then walking abrode to heare you talke of husbandry. Are these that I see your Pastures, where your fatte Oxen, and your Mares, and your Coltes goe leaping?

Of pasture & medowe

CONO. They are so. I lay all my Pastures seuerall, for euery kinde of Cattell to be by hym selfe: in the hythermost that you see, are my Cattell that I fatte: in the next are my Horses, my Mares, and my Coltes: in the next are my young breede, Yeerelinges, and Twoyeerelinges. The Meddowes that you see in yonder Valley, lye all to be mowed. Here next to my house, are my Sucklings, that are brought to their dammes to sucke thryse a day, and therefore ought to be neare: howe be it, suche as feede farre of, must diligently and dayly be looked to, for feare of diseases.

RIGO. Since I haue troubled you this farre, I can not leaue till I vnderstand all your orders.

CONO. No trouble at all to me, but rather as I said before, the recording hereof, is my great ioy: for in talking of these matters you bring me abedde.

RIGO. I pray you then take the paines to describe me the ordering of Pastures and Meddowes, when as there seemeth to be a great affinitie betwixt them and Corne grounde, and because they are sometimes also to be plowed, mee thinketh this part remayneth to be spoken of.

CONO. With all my hart, I wyll satisfie your desyre in as muche as I am able: and in deede since I haue all this whyle spoken of Corne grounde, it is not out of order to tell you my minde of Pasture: and although Cato in some places dooth geue the preeminence to the Vineyarde, yet other olde wryters doo most of all preferre Pastures, as the grounde that requireth least a doo about it: and therefore they were called as Varro sayth, Prata, because they were parata, alway in redinesse, and needed neither great charge nor labour, nor are in danger of stormes or tempestes, as other kinde of grounde is, except suche parcels as lye neare Riuers and Ilandes, whiche are sometimes ouerflowed: and that discommoditie is sufficiently recompenced with the fatnesse that the water leaues behinde it, whiche enricheth the grounde,

grounde, and makes it the better yeerely to yeelde his gayne eyther in Paſture or Meddowe. The Paſtures with vs doo commonly ſerue both for Paſture or Meddowe when we liſt, ſpecially in ſuche places where the grounde is ritche and drye, whiche they had rather to employ to Paſture, becauſe with dounging of Cattell, it wareth alwayes the better, whereas with continuall bearing of Hey, it hath growen to be mollie and nought: but where the grounde is alwayes wette and watriſhe, there it is better to let it lye for Meddowe. Columella maketh two kindes of Paſture grounde, whereof one is alwayes drye, the other ouerflowen. The good and the riche grounde hath no neede of ouerflowyng, the Hay being muche better that groweth of the ſelfe goodneſſe of the grounde, then that whiche is forced by waters: whiche ſometime notwithſtandyng is needefull, yf the barrenneſſe of the grounde requireth it: for in badde and noughtie grounde, good Meddowe may be made, if it lye to be ouerflowen: but then muſt the grounde neither lye hollowe, nor in hilles, leſt the one of them keepe the waters vppon it to long, and the other preſently let it foorth agayne. Therefyre lyeth the grounde beſt, that lyeth leueleſt, which ſuffereth not the water to remayne very long, nor auoydeth it too ſoone. If in ſuche grounde it chaunce to ſtand ouerlong, it may be auoyded with waterſtreame at your pleaſure: for both ouerplus, and the want of water are alike hurtfull vnto Meddowes. It is very handſome, where drye and barrayne grounde lyeth ſo by the Riuer, as the water may be let in by Trenches when you lyſt: in fine, the occupying of Paſture groundes require more care then trauayle. Firſt, that we ſuffer not Buſſhes, Thornes, nor great Weedes, to ouergrowe them, but to deſtroy ſome of them, as Brembles, Bryers, Bulruſſhes, and Sedges in the ende of Sommer, and the other that be Sommer Weedes, as Sowthyſtell, and all other Thyſtels, in the Spring. You muſt take heede of Swyne, that ſpoyle and turne vp the grounde vnſauouredly, and all other Cattell: except it be in hard and drye weather, for otherwyſe they gulf and marre the grounde with the deepe ſincking of their feete treading in the Graſſe, and breaking the Rootes. The badde and barrayne groundes are to be helped with doung in Winter, ſpecially in

Febꝛuarie, the Moone encreasing, and the stones, stickes, and suche baggage as lye scattered abꝛode, are to be thꝛowen out sooner oꝛ later, as the grounde is. There are some Meddowes that with long lying, are ouer growen with Mosse, whiche the old husbands were woout to remedie with casting of certaine seedes abꝛode, oꝛ with laying on of doung, specially Pigeons doung: but nothing is so good foꝛ this purpose, as often to cast asshes vpon it, foꝛ that destroyeth Mosse out of hand. Notwithstanding, these are but troublesome remedies. The best and certainest is to plowe it: foꝛ the grounde after his long rest, will beare goodly Coꝛne. But after you haue plowed it, it wyll scarse recouer his olde estate againe foꝛ Pasture oꝛ Meddowe in thꝛee oꝛ foure yeeres. When you meane to let your ground lye againe foꝛ Meddowe oꝛ Pasture, your best is to sowe it with Oates, and to harrowe the grounde euen and leuell, and to hurle out all the stones and suche thinges as may hurt the Sythe: foꝛ Oates is a great breeder of Grasse. Some doo cast Hey seede, geathered from the Heyloaft oꝛ the racks, ouer the grounde befoꝛe they harrowe it. Others agayne, when their Meddowes haue lyen long, sowe Beanes vpon them, oꝛ Rape seede, oꝛ Millet, and the yeere after, Wheate: and the thirde yeere they let them lye againe foꝛ Meddowe oꝛ Pasture. You must beware, that whyle the ground is loose and soft, you let not in the water, foꝛ the foꝛce of the water wyll washe away the earth from the rootes of the Grasse, and wyll not suffer them to growe togeather: neither must you (foꝛ the like daunger) suffer Cattell to come vppon it, except in the seconde yeere Goates, oꝛ Sheepe, oꝛ suche like, after you haue mowed it, and that yf the season be very dꝛye. The thirde yeere you may put on your greater soꝛt of Cattell againe, and yf the grounde be hilly and barrayne, you may doung the highest part of it in Febꝛuarie, as I saide befoꝛe, casting on it some Hey seede: foꝛ the higher part being mended, the rayne oꝛ water that comes to it, wyll carry downe some part of the richenesse to the bottome, as I saide befoꝛe, when I spake of the manuring of earable grounde. But yf you wyl lay in newe grounde foꝛ Meddowe, and that you may haue your choyse, take such as is ritche, dewye, leuell, oꝛ a little hanging, oꝛ choose suche a valley, where the water

ter can neither lye long, nor runne away to faſt: neither is the rancke Graſſe alwayes a ſigne of good grounde: for what good lyer Graſſe is there ſaith Plinie, then is in Germanie, and yet you ſhall there haue ſand within a little of the vpper part. Neither is it alway a watrie grounde where the Graſſe growes hie, for the very Mountaines in Sycherland yeeld great and hie Graſſe for Cattell. The Paſtures that lyes by the Lakes of Dumone in Auſtri and Hungry are but ſclender, nor about the Rhine, ſpecially at his falling into the Sea about Holland, as likewyſe in Friſlande and Flaunders. Cæſar Vopiſcus, the Feeldes of Roſcius were the principal of Italie, where the Graſſe would ſo ſoone growe, as it woulde hide a ſtaffe in a day. You may make good Meddowe of any grounde, ſo it may be watred. Your Meddowes are to be purged in September and October, and to be ridde of all Buſſhes, Brambles, and great foule Weedes, and al thinges els that annoy them: then after that it hath often been ſtirred, and with many times plowing made fine, the ſtones caſt away, and the cloddes in euery place broken, you muſt doung it well with freſhe doung, the Moone encreaſing. Let them be kept from gulling and trampling of Cattel. The Mouldhilles & dounging of Horſe and Bullockes, muſt with your Spade be caſt abroade, whiche yf they remaine, would eyther be harberours of Antes and ſuche like Uermine, or els breeders of hurtful and vnprofitable weedes: your Meddowes muſt be laide in towardes Marche, and kept from Cattell, and made very cleane: yf they be not ritche, they muſt be mended with doung, whiche muſt be laide on, the Moone encreaſing, and the newer the doung be, the better it is, and the more Graſſe it makes: whiche muſt be laide vpon the toppe of the higheſt of the grounde, that the goodneſſe may runne to the bottome. The beſt hearbe for Paſture or Meddowe, is the Trefoyle or Clauer: the next is ſweete Graſſe: the wooriſt as Plinie ſaith, is Ruſſhes, Fearne, and Horſetayle.

RIGO. Howe ſhall I knowe when the Graſſe is ripe, and readye to be cutte?

CONO. The time of cutting of it, is when the Bent beginneth to fade and to ware ſtiffe, and before it wyther. Cato biddes not to mowe your Graſſe with the lateſt, but before the ſeede be ripe.

ripe. It is best cut downe before it wyther, whereby you shall haue both more, and better Hey of it. Some, where they may ouerflowe it, doo water it a day before they cut it, it cutteth better after a dewye Euening.

RIGO. Doo you cut Grasse in the like sort as you doo Corne?

CONO. Almost in the like same sort, some do vse short Sythes, mowing it with one hand: but we here doo vse the common great Sythe, mowing with both our handes, as I saide before, that Oates, and Barley, and suche other like Corne was mowed: whiche Sythes we vse to sharpe with Whetstones, or instrumentes of Wood dressed with Sande. The Grasse being cutte, must be well tedded and turned in the Sommer, and not cocked till it be drye: and yf it chaunce to be wette with rayne, it must not be turned, till the vpper part be dryed. There is a measure to be vsed in making of it, that it be not had in too drie, nor to greene. The one sort, yf the iuyce be dryed vp, serueth only for litter: the other (too greene and moyst) yf it be carryed into the Loft, rotteth, and the vapour being ouerheated, falleth on fyre and burneth. And yf so be the rayne chaunce to fall vpon the Grasse that is newe cut downe, yf it be not stirred, it takes not so muche harme: but yf it be once turned, you must still be stirring of it, otherwyse it will rotte. Therefore the vppermost part before it be turned, must be well dryed with the Sunne and the Winde: when it is dryed, we lay it in windrowes, and then make it vp in Cockes, and after that in Moowes, which must be sharpe and piked in the toppe, the better to defend it from the rayne: whiche yf it doo not fall, yet is it good so to doo, that they may sweate in the saide Moowes, and digest what so euer moysture is in it. And therefore good husbandes doo not lay it vp in their Loftes, till suche time as it hath sweat in the Feelde. Grasse is commonly mowed twyse a yeere, in May or June, and againe after Harnest: the first mowing is counted the best. As soone as the Hey is of after the first mowing, it woulde be ouerflowed (yf you may conueniently) to the ende the after swath may be mowed in Autume, whiche they call in Latine Cordum. In the Dukedome of Spoleto, it is saide they mowe foure times a yeere, being drye grounde, and diuers other places thryse a yeere. Medica may be

cutte

cutte fiue times a yeere, yf it be ordered as it ought to be. It is beſt mowed when it beginneth to flowre, for it muſt not growe to ſeede: being dryed, it is made vp in bundels, and kept good three yeeres, to the great comfort of poore Cattell: but becauſe I haue tolde you of Medica before, it is but vayne to rehearſe it agayne.

RIGO. You haue ſpoken of a very large and great knowledge of huſbandry, whiche out of doubt requireth in a man great trauayle and diligence.

CONO. It requireth in deede great diligence and trauayle, howebeit, it recompenceth the paines and the charges not without great gaynes, whereof Plinie bringeth for example Caius Creſinus, who when vppon a little peece of grounde he reaped more fruite and graynes a great deale, then his neighbours did vppon their great occupiers, grewe into great hatred amongſt them, as though they had bewitched their feeldes: whereof being accuſed by Spurius Albinus, and fearing to be condemned, when the Queſt ſhould paſſe vppon him, he bringes all his inſtrumentes of huſbandry into the common place, and brought in therewithall his daughter, a iolly great royle, his iron tooles perfectly wel made, great Spades, mightie Coulters, and luſtie Cattell: loe here (quoth he) myne enchauntments, neither can I bring before you my great and painefull labours, watchinges, and ſweat: wherevppon he was preſently quitte by the voyces of them all. But I keepe you to long about my huſbandry, it is good time we leaue and goe home. The diligẽce of Caius Creſinus.

RIGO. With a good wyll. If I may obtayne one thing at your handes, whiche when you haue made an ende with, I wyll trouble you no longer.

CONO. What is that?

RIGO. If a man woulde bye a Farme or a Mannour, in what ſort ſhall he beſt doo it? for I dout not but you haue good ſkill in ſuche matters.

CONO. Iſcomachus in Xenophon telleth, that his father taught him that he ſhoulde neuer buye a peece of grounde, that had been ſkilfully or curiouſly huſbanded before, but rather ſuche ground as by the ſlouthfulneſſe and pouertie of the maiſter, had lyen vntilled and neglected, and yet ſeeme to be very good grounde: as

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it is better to bye a leane horse, so that he be not olde, and that he haue the tokens of a good horse, then a fatte horse, and one that is curiously kept. A well ordered peece of lande is helde deare, and yeeldes no great encrease, and therefore is neither so pleasant nor so profitable, as that which by good husbandry may be made better. Cato woulde haue two thinges to be obserued in bying of lande, the goodnesse of the ground, and the holsomenesse of the ayre: of whiche two, yf eyther be lacking, whosoeuer dooth bye it, he iudgeth him mad, and meete to be sent to Bedlem: for none that is well in his wittes, wyll be lowe cast vppon barraine grounde, nor hazarde him selfe for a little riche grounde, to be alwayes subiect to pestilentiall diseases: for where a man must deale with the Deuil, there is not onely his commoditie, but his life doubtfull, and rather his death then his gayne certaine. After these two principall notes, as Columella sayth, Cato added of like weyght these three that folowe to be regarded: the Way, the Water, & the Neighbour. The goodnesse of the waye is a great matter, for it both makes the maister haue a delight to goe about it, and it is commodious for carriage, whiche bringeth great gayne, and litleth charges. Of the commoditie of water who doubteth, without whose vse no man is able to liue. Of a mans neighbour, he woulde haue a man haue speciall regarde. Hesiodus sayth, πῆμα κακος λειτον, an euill neighbour is a great mischiefe. I haue knowen diuers, that for the troublesomenesse of theyr neighbour, haue forsaken good dwellings, and changed golde for copper, because they haue had false knaues to their neighbours, and quarellers, that suffering their cattel to runne at large in euery mans ground to spoyle their Corne and their Vines, would also cutte downe wood, and take what so euer they finde, alwayes brabling about the boundes of their grounde, that a man coulde neuer be in quiet for them: or els haue dwelt by some Caterpiller Ruffian or Swashbuckler, that would leaue no kinde of mischeefe vndoone. Amongst all which commonly there is not so ill a neighbour, as the newe vpstart, that takes vpon him the name of a gentleman, who though you vse him neuer so well, wyll at one time or other geue you to vnderstand from whence he comes, and make you syng with Claudian.

ASPERIVS NIHIL EST HVMILI CVM SVRGIT IN ALTVM.

A leudar vvretche there lyues not vnder skye,
Then Clovvne that climes from base estate to hye.

As the Prouerbe in Englande is, Set a Knaue on horsebacke, and you shall see him shoulder a Knight: for an Ape wyll be an Ape, though you clothe him in Purple. Surely M. Portius would haue a man shunne the neighbourhood of suche as the pestilence. I for my part am happie in this point, that I haue no neighbour that I neede to feare.

RIGO. Perhaps they dare not for your authoritie doo, as otherwyse they woulde.

CONO. But since death and other casualties riddes a man of them, the dwelling is not to be left, yf it haue other good commodities, except it be placed in the borders of sundry Countreys that be subiect to great sicknesses. Some commend the dwelling that hath faire wayes about it, is neare some Riuer or good market, wherby a man may carrie his marchãdize with lesse charges. The olde fellowes would neuer haue a man place him selfe neare the hie way, for pilfering of such as passe by, and troublesomenesse of ghestes, as I saide before in speaking of the placing of an house. In the letting of a Farme, those thinges are to be obserued that I spake of before, in describing of a Bayliffe of husbandry and his labour: that you let it to suche, whose trauayle and good behauiour you may be assured of, and that you regard more their good ordering of the lande then the rent, which is least hurtfull, and most gaynefull. For where as the grounde is well husbanded, you shall commonly haue gayne, and neuer losse, except by vnreasonablenesse of the weather, whiche the Ciuil Lawyer sayth shoulde not be any damage to the Tenaunt, or the inuasion of the enimie, where the Tenaunt can not helpe it. Besides, the lorde must not deale with his Tenaunt so straightly in euery poynt, as by lawe he might, for his rent dayes, bargaynes of wood, quit rentes, or suche, the rigour wherein is more troublesome then beneficial: neither ought we to take euery aduantage, for lawe many times is right plaine wrong: neither must ye be to slacke on the other side, for too muche gentelnesse many times makes a man the woorst. And therefore it is good yf the Farmer

The letting of a Farme.

be slacke in his paimentes, to make him to knowe it: but in no wyse to be a rayser or enhaunser of rentes, for that discomforteth, and many times vndooeth the Tenaunt. Moreouer, you must not lightly change the olde Farmer, both because of his desertes, and that he is better acquainted with the grounde then a newe. L. Volusius would alwayes say, that he was in best case for his landes, that had alwayes his Tenauntes borne and bread vp in them, whereby the long familiaritie shoulde make them more louingly to vse them selues: for sure it is an euill vse often to change Tenauntes, and therefore I doo like well that order, where the land is let for the liues of the Tenaunt, his Wyfe, and his Chylde, paying a yeerely rent, so that as long as he payes his rent, and keepes the reparations, it shall not be lawfull to deceiue him: for hereby the Tenaunt shall be prouoked to order the grounde with more diligence, to repayre the house, & to looke to it in al pointes as to his owne, bestowyng many times as muche as he hath vpon it. This way of letting lande mee seemes is best, where the ground is subiect to the Sea or the Riuer, or other daunger, that the Tenaunt be charged with the maintenaunce of it. And here be sure that you let it rather to one of habilitie, then to a an vnthriftie man that is not able to beare it, whereby you may loose both your land & your rent. In suche place as lyes neare the lord, he may occupie it by his Bayliffe, or to hawues: but where it is farre of, it is better to let it out for a yeerely rent vpon ỳ foresayd couenantes. For yf you occupie it with your seruantes, they wyl eyther looke yll to your cattel, or your ground, or suffer thinges to be stolen, or steale them selues, or make you be at more charges then needeth, & be careleſſe in euery thing. In letting of ground commonly it is couenaunted, that the Tenaunt shall not let nor sell without leaue of the lorde, and that he shall not breake any Pasture or Medowe lande, and what, and howe muche he shall sowe of euery kinde of grayne; howe much he shall haue for Pasture, howe muche he shall let lye, and howe muche he shal mend. Here haue you almost as muche as I am able to say in husbandyng of the grounde.

RIGO. I thanke you, you haue greatly delighted me with the describing of your Pasture grounde and Earable.

¶ Theende of the fyrst Booke.

Thrasybulus. Marius. Julia.

BEcause of the Aliance betwixt Hearbes, Trees, and Corne, and because their husbandry is almost one, it is reason that next to the first booke, written of earable grounde and tyllage, shoulde folowe the description of Orchardes, Gardens, and their fruites. Virgil in wryting of husbandry, left this part vnwritten of: howbe it, diuers others both olde and newe wryters haue not without some diligence written of this part, but yet by snatches (as it were) and not throughly: whose opinions, ioyned with myne owne experience, it seemeth good to me in this booke to declare. And since the vse of Orchardes and Gardens is great and auncient, and that Homer wryteth, howe Laertes the olde man, was woont with his trauayle in his Orchardes, to driue from his minde the sorowe he tooke for the absence of his sonne. And Xenophon reporteth, that king Cyrus, as great a prince as he was, woulde plant with his owne handes, and sette Trees in his Orchardes, in suche order, as it seemed an earthly paradise. Qu. Curtius writeth of Abdolominus, that for his great vertue, of a poore Gardner, came to be king of the Sidonians. And surely, not vnworthyly is this part of husbandry esteemed, seeing it doth not alonely bring great pleasure, but also is greatly profitable for the maintenaunce of household, and the sparing of charges, ministring to the husband dayly foode and sufficient sustenaunce without cost. For when (as Columella sayth) in the olde time the people liued more temperately, and the poore at more libertie feede of flesshe and milke, and suche thinges as the ground and foldes yeelded: but in the latter age when ryotte and daintinesse began to come in, and the wealthyer sort to esteeme no fare but costly, and farre fetched, not content with meane diet, but coueting such thinges as were of greatest price, the poore people as not able to beare the charges, were banished from the costlier cates, and driuen to content themselues with the basest foode.

The vse of Gardens of great antiquitie.

foode. And hereof sprang at the fyrst the planting of Orchardes, and making of Gardens, wherewith the poorest creature that was, might store his Kitchin, and haue his victuals alwayes at hand, the Orchard and Garden seruing for his Shambles, with a great deale more commendable & hurtlesse dyet. Herein were the olde husbandes very carefull, and vsed alwayes to iudge, that where they founde the Garden out of order, the wyfe of the house (for vnto her belonged the charge thereof) was no good huswyfe, for they shoulde be forced to haue their victuals from the Shambles or the Market, not making so great account of Colwoortes then, as they doo nowe, condemning them for the charges that were about them. As for flesshe, it was rather lothed then vsed amongst them. Only Orchardes and Gardens did chiefely please them, because the fruites that they yeelde, needed no fyre for the dressing of them, but spared wood, being alwayes of them selues redy dressed, easie of digestion, and nothing burdensome to the stomacke: and some of them seruing also to pouder or preserue withal, as good marchandize at home, as Plinie sayth, not driuing men to seeke Pepper as farre as Indie. Of Lucrin, I the Oysters not regarde, as the Poet sayth. And therefore to make them of more worthynesse, and that for their common profyte they shoulde not be the lesse regarded, there were diuers noble men of the house of Valerius, that tooke their surnames of Lettuse, and were not ashamed to be named Lettisimen. The olde people had in great estimation the Gardens of the daughters of Altas, and of the kinges Adonis, and Alcinoi, of whom Homer so muche speaketh, as also the great vaulted Gardens, eyther built by Semiramis, or by Cyrus the king of Assyria. Epicure is reported to be the fyrst that euer deuised Garden in Athens, before his time it was not seene that the pleasures of the Countrey were had in the Citie. Now when Thrasybulus trauayling in the affayres of his Prince, chaunced to come to the house of Marius, and carryed by him into a Garden that he had, whiche was very beautifull, being ledde about among the sweete smelling flowres, and vnder the pleasaunt Hearbers, what a goodly sight (quoth) Thrasybulus is here: howe excellently haue you garnished this paradise of yours with all kinde of pleasures: Your Parlers, & your banketting houses both

An euyll Garden, token of an ill huswyfe.

Of Lettusyns.

both within and without, as all bedecked with pictures of beautifull Flowers and Trees, that you may not onely fede your eyes with the beholdyng of the true and liuely Flower, but also delight your self with the counterfait in the midest of Winter, seeing in the one, the painted flower to contend in beautie with the very flower: in the other, the wonderfull worke of Nature, and in both, the passing goodnes of GOD. Moreouer, your pleasaunt Herbers to walke in, whose shaddowes keepe of the heate of the Sunn, and if it fortune to Raine, the Cloisters are hard by. But specially this little Riuer with most cleare water, encompassing the Garden, doth wonderfully set it forth, and here withall the greene and goodly quickset Hedges, ne chargeable kind of enclosures, differeth it both from Man and Beast. I speake nothing of the well ordered quarters, whereas the Hearbes and Trees are seuered euery sort in their due place, the Pot hearbes by them selues, the Flowers in an other place, the Trees and Impes in an other quarter, all in iust square and proportion, with Alleis & walkes amongst them. Among these goodly sightes, I praie you remember according to your promise (for so the time requireth) to shew me some part of your great knowledge in Garden matters, sith you haue vppon this condition heard me heretofore grabling, or rather weriyng you with the declaimyng of my poore skill in the tilling of the feld.

MARIVS. Your memorie is herein a little to quick, but what shal I doe? Promise must be kept, and since you wil needs force me, you shall heare me babble as well as I canne, of my knowledge in Gardenyng: but not with the like pleasure that I heard you talkyng, of your grasyng and your ground.

THRA. Yes truely, with as great pleasure and desire as may be.

MARIVS. Come on then, let vs here sitte downe in this Herber, and we wil now and then rise and walke, resting vs as oft as you will: in the meane time *IVLIA* shall make redy our supper. And first, euen as you began with the chosyng of a place meete to set your house vpon, so must I with the choise of a Plot meet for a Garden. The ordring of Gardens is diuers, for some are made by the Mannour houses, some in the Suburbes, some

in the Citie where so euer they be, if the place will suffer, they must be made as neare to the house as may be: but so, as they be as farre from the Barnes as you can, for the Chaffe or dust blowyng into them, and either subiecte to the Dounge heape, whereby it may be made riche, or els in some very good ground that hath some small Broke running by it, or if it haue none such, some Well or Condite, whereby it may be watered. An excellent plot for the purpose is that which declineth a litle, and hath certaine gutters of water running through diuers partes therof: for Gardens must alwaies be to be easily watered, if not with some running streame, some pump to be made, or kettle, Mill, or such like, as may serue the turne of a naturall stream. *Columella* would haue you make your search for water, when the Sunne is in the latter part of *Virgo*, which is in September, before his entrance into the Winter *Æquinoctiall*, for then may you best vnderstand the strength or goodnes of the springs, when after the great burning heat of the Sommer, the ground hath a long while continued without raine. If you cannot thus haue water, you must make some standing Pond at the vpper part of the ground, that may receiue and containe such water as falles from aboue, wherewith ye may water your Garden in the extreame heat of the Sommer: but where neither the nature of the soile, nor conueiance by Condit or pumpe, or running streame is to be had, you haue no other helpe but the raine water of winter, which if you also haue not, thē must you delue and lay your Garden three or foure foote deepe: which being so ordered, will well be able to abide what soeuer droughth doe happē. This is also to be regarded, that in gardens that are destitute of water, you so order them into seueral parts, that what part you will occupie in Winter, may lie toward the South, and that which shall serue you for Sommer, may lie towards the North. In a Garden, as in the choise of Corne ground, you must loke whether the goodnesse of the ground be not hindered by the vnskilfulnes of him that hath occupied it. You must also make choise of your waters, of which the best (as *Plinie* saith) are the coldest, and such as be swete to drinke: the worst that comes from Ponds, or is brought in by Trenches, because they

The time of searching for water.

bring with them the sedes of grasse and wædes: but the ground doth most delight in raine water, which killeth wormes and baggage that brædes in it: but for some herbes, salte water is nædefull, as the Raddish, Beete, Rewe, Saurell, to which all salt water they say, is a speciall helper, making them both pleasant and fruitful: to al others, swæte water is onely to be vsed. And because I haue begun to entreat of watring, I must giue this note, that the times of watring is not in the heat of the day but earely in the morning, & at night, least the water be heated with the sunne: onely Basill you must water at none, the sæde somthing wil come the soner vp, if the be sprinckled at the first with hot water. You haue here heard, that the first nædefull thing for a Garden, is water. The nerte to that is enclosure, that it be wel enclosed, both from vnruly folks and theeues, and likewise from beasts: least lying in waite for your Herbes and your Fruites, they may both bereaue you of your paines, and your pleasure: for if either they be bitten with Beasts, or to often handeled with men, it hindreth them both of their growth and seding: and therfore it is of necessitie to haue the Garden well enclosed. Now for enclosures, there are sundry kinds, som making earth in mould do counterfeite Brickwals: Others make them of lime and stones: some others of stones laide one vpon an other in heapes, casting a ditch for water round about them, which kinde *Palladius* forbids to follow, because it will draw out the moisture from the Garden, except it be in marish grounde. Other make their fence with the sædes and sets of Thorne: some make them of mudde wals couered with straw or heath. *Varro* maketh mention of foure kinds of enclosure, the first naturall, the second wilde, the thirde souldierly, the fourth, of carpenters worke. The first and naturall is the quickset hedge, being set of yong Thornes, which once well growen, regardeth neither fire nor other hurt. The second is the common hedge made of dead wood, well staked and thicke plashed, or railde. The thirde the souldiers fortifieng, is a deepe ditch with a rampier: but the ditch must be so made, as it may receiue al the water that comes frō above, or fals into it, wherin the banure must be so steep, that it may not easily be climed.

The time of watering of Gardens.

Enclosing of Gardens.

This kinde of fence is to be made, where the ground lies nære the hie way, or buts vpon the Riuer, of which sort I shall haue occasion to speak more hereafter. The fourth fence made by the carpenter or by the mason, is commonly knowen: wherof there is foure sorts, either of stones, or of brickes, of turfe, and earth, and little stones framed in moulde. *Columella* following the ancientest authors, preferreth the quickeset hedge before the deade, both because it is lesse chargeable, and also endureth the longer, continuing a long time: which hedge of yong thornes, he teacheth to make in this sort. The place that you determine to enclose, must after the beginning of September, when the ground hath been well soked with raine, be trenched about with two furrowes, a yard distant one from the other, the deapth & breadth of euery one of them must be two foote, which you must suffer to lie emptie al winter, prouiding in the mean time the sedes that you meane to sowe in them, which must be the berries of sharpe thornes, briers, holly, & wilde Eglantine, which the Greekes call κυνόσβατος, dogbrier. The berries of these you must gather as ripe as you may, and mingle them with the floure or meale of tares, which when it is sprinckled with water, must be put vpon old ropes of ships, or any other ropes, the ropes being thus handled & dried, must be laied vp in some bowded floore. Afterward when winter is done, within fourtie daies after, about the comming of the swallow, if there be any water remaining in the furrowes, it must be let out, and the mellowed earth, which was cast out of the furrowes in the ende of sommer, must now be cast in againe, till you haue filled them vp to the midst: thé must you handsomly vnfold the ropes, and lay them in length through both the furrowes, and so couer them, taking good heed that you throw not too much earth vpon them for hindering the spring, which commonly vseth to appére within thirtie daies after, & when they be growen to be of some height, they must be made to encline to the space betwirt the two furrowes: in which space you must haue a little walled hedge, to teach the springs of other furrowes to climbe by, which wil be a iolly stay and a comfort to them. But I haue an other & a more readier way of making of them, which you first practising

The making of a quickset hedge.

practising in this Countrey, diuers others haue followed. I also do make a certaine Ditch, and gathering in the woode the yong springes of Thornes, cutting off their toppes, I set them on the bancke of the Ditch, so that they stand halfe a foote out of the grounde, plucking vp all the weedes (specially the first Sommer) that growe about them, and sucke away the iuice that comforts the sette. The Rootes being thus rid. I couer all the earth about them with strawe, wherby both the dewe of the night is let into the Rootes, & the poore Plant is defended from the burning of the Sunne. The yeare after, I make a litle slender raile of poules, whereunto I lay vp the springes, weauing them in such sort as I will haue them to growe, which I yearely make higher, according to the height that I would haue the Hedge to spring. Eight, or at the vttermost nine foote, is a sufficient height, and what so euer spring aboue must be plashed of one side or the other, to make the fence the stronger. When I haue thus done, I matte it thicker and thicker euery yeare, filling vp the places where I see it thinne, with such bowes as I see grow out of order: and thus is it wouen so thick with yearely bindings, that not so much as a small bird is able to passe thorowe it, nor any man to looke through it. When it is thicke enough and big enough, the superfluous springes must euerie yeare be cut. This hedge can neuer be destroyed, except it be plucked vp by the Rootes: neither feareth it the hurt of fire, but will growe the better for it. And this is my way of enclosing a Garden, as the pleasantest, most profitable, and of least charges.

Another newer and better way of making a quickset hedge.

THRA. There is an other way of making of a quickset Hedge, which our Hedgers in the Countrey doe vse, which is some thing the stronger. For setting the yong settes, as you haue saide before, when they be growen to some greatnes, they cut the Thorne neare to the ground, and being halfe cut and broken a sunder, they bowe it along the Hedge, and plash it. Frō these cuttes spring vp newe plants, which still as they growe to any highnes they cut them, and plash them againe: so doing continually, till the Hedge be come to his full height. This way the Hedge is made wonderfull strong, that neither hogge nor other beast, is able to breake through it: but the other is a great

Another sort of hedging.

deale more pleasant to the eye. But if I haue not settes enough to serue, may I make an Impe Garden of their seede?

MARIVS. Yea very well. Make your Thorne Garden or store plot in this sort. Take your Berries or stones, & mingle them with earth, lay them vp for the first yere in some place meete for them, the nert yeere sowe them as thicke as you can, and ye shall within a litle time haue a whole wood of Thornes.

THRA. You haue now spoken of Water and enclosure, two principall pointes in a Garden: It now remaineth for you to speake of the ground meete for a Garden, and of the order of dressing of it.

MARIVS. Of the sundrie sortes of ground, and of the discerning of them, because you in your describing of Corne ground before haue sufficiently spoken, I do not thinke it needfull for me to repeate it. Againe, it is enough to me to adde onely this, that the ground ought not to be too riche, nor too leane, but fat and mellowe, which bringeth forth a small kinde of grasse like heares: such ground requires least labour, the stiffe and the rich ground asketh greater paines about it, but doth recompence it again with his fruitfulnes. The stiffe, leane, and cold ground, is not to be medled with, as *Columella* writeth in appointing good ground for Gardens.

The ground that giues the ripe and mellowed mould,
And doth in working cromble like the Sandes:
That of his owne good nature yeeldeth manifold,
Where Walwoort with his purple berrie standes.
For neither doth the ground that still is drie,
Content my minde, nor yet the watrie soile:
Whereas the Frogge continually doth crie,
While in the stincking Lakes he still doth moile.
I like the land that of it selfe doth yeeld,
The mightie Elme that branches broad doth beare,
And round about with Trees bedecks the field,
With Trees, that wilde beares Apple, Plumme, and Peare.
But will no Bearefoote breed, nor stincking Gumme,
Nor Yewe nor Plantes, whence deadly poisons come.

And

And this much of the Garden ground, which as I said, is watred, or may be watred, and is enclosed either with a wall, a hedge, or some other safe enclosure. After this, it is needfull it lie well to the Sunne, and warme: for in ground that is very cold, the warmth of the Sunne wil not much auaile it. And contrarie, if it be a hotte burning Sand, the benefite of the Heauens can little helpe it. You must yet loke, that it lie not subiect to ill winds that are drie and scorching, and bring frosts and mistes. But now to the ordering of your Garden. First, you must be sure that the ground which you meane to sowe in the Spring, be well digged in the fall of the leafe, about the kalends of October: and that which you Garden in the fall of the leafe, must be digged in Maie, that either by the colde of Winter, or the heate of Summer, both the clodde may be mellowed, and the rootes of the weedes destroied, nor much before this time must you doung it. And when the time of sowing is at hand a fiue daies before, the weedes must be got out, and the doung laied on, and so often and diligently must it be digged, as the grounde may be throughlie medled with the moulde. Therefore the parts of the Gardens must be so ordered, as that which you meane to sowe in the end of Sommer, may be digged in the Spring: and the part that you wil sow in the Spring must be digged in the end of Sommer: so shall both your fallowes be seasoned by the benefite of the cold and the Sunne.

What to be considered in the choise of Garden ground. Ayre. Winds.

The ordering of Gardens.

The beds are to be made narrow & long, as. xij. foote in length, and fiue in breadth, that they may be the easier weeded: they must lie in wet and watrie ground two foote hye, in dry ground a foote is sufficient. If your beds lye so drie, as they will suffer no water to tarry vpon them, you must make the spaces betwixt hier, that the water may be forced to lie and auoid when you will. Of the kinds and sorts of dounging being sufficientlie entreated of by you, I will saie nothing: only adding this, that the doung of Asses is the best, because it breedeth fewest weeds: the nert is Cattelles doung, and Sheepes doung, if it haue lien a yere. The ground as I saied which we meane to sowe in the Spring, we must after the end of Sommer let lye fallowe, to be seasoned with the frost & the cold: for as the heate of Sommer,

Beddes.

Of digging and dunging of Gardens.

mer, so both the cold of the Winter bake and season the ground. When Winter is done, then must we beginne to doung it, and about the fourteenth or fifteenth of Januarie, we must digge it againe, deuiding it into quarters and beddes. First must the wæedes be plucked vp, and turfes of barraine ground must be layed in the Alleies, which being well beaten with Bætles, and so trod vppon, that the Grasse be worne away, so that it scarse appéere, it will after spring vp as fine as little heare, and yélde a pleasant sight to the eie, which will be very beautifull. When you haue seuered your flowers by themselues, your Physicke Hearbes by themselues, and your Potte hearbes and Sallets in another place, the beddes and the borders must be so cast, as the wæders hands may reach to the middest of them, so shall they not néede in their labour to tread vpon the beddes, nor to hurt the hearbes. And this I thinke sufficient for the preparing of your ground before the sowing.

Of sowing.

Now will I speake of sowing, and what shalbe sowed in euery season. To speake of all sortes of hearbes and flowers, were an endlesse labor, only of those that are most néedefull, I meane to entreat. And first of hearbes, some are for the Potte, some for the sight, some for pleasure and swæte sauour, and some for Phisicke. And againe, some are for Winter, some for Sommer, and some betwixte both. The first time of sowing after Winter, is the moneth of March, Aprill, and Maie, wherein we vse to sowe Colworts, Radish, Rape, and after Bætes, Lettuse, Sorell, Mustardeséede, Coriander, Dill, and Garden Cresses. The second season for sowing, is in the beginning of October, wherein they set Bæts, and sowe Smallage in *Nigella* and *Arreche*. The third season, which they cal the Sommer season, in some place the Gardners begin in January, wherin they set Cucumbers, Gourds, Spinnach, Basill, Purslaine, and Sauerie. Many things may be sowed betwixt these seasons, and yet do very well. All Garden hearbes are commonly sowen before the tenth of June, such things as you wold not haue séed, you may sow after this time. Some thinges are sowed onely two times a yére, in the spring, and in the end of Sommer. Others againe at sundrie times, as Lettuse, Colworts, Rocket, Radish, Cresses, Coriander, Cheruill,

Three seasons to sow in.

Cheruill, and Dill. These are sowed about March, or about September, and *Columella* saith, do come either of the sæde, or of the slippe: some of the Rote, some of the stalke, some of the Leafe, some of the Clot, some of the Head, some of both: others of the Barke, others of the Pith, some, both of the sæde and the slippe, as Rewe, wild Marierum, and Basil, this they cutte of, when it comes to be a handfull hie: Others growe both of the Sæde and the Rote, as Onions, Garlike, and such like. And although all thing will growe of their sædes, yet this they saie, Rewe will not do: for it very seldome springes, therefore they rather set the slippes. These that are set of the Rote, do commonly last longer, and braunch better, putting forth young slippes from his sides, as the Onion and Gith. The stalke being cutte, they all do spring againe for the most part, except such as haue speciall stalkes, called *Theophrastus* ἀπόκαυλα, that is, such as when the stalke is cutte, growe no more: *Gasa* interpretes it *Secaulia*. The Rape and the radish, their leaues being pulled away and couered with earth, do growe and continue till Sommer. The fruites of some is in the earth, some without: some both within and without, some lye and grow, as the Cucumber and the Gourd, and sometimes hang, though of greater weight by much then the fruites of trees: some require staies and helpes to clime by, as Hoppes, Lupines, and Pease: some sæde groweth better. The newer they be, as Lekes, *Nigeba Romana*, Cucumbers, and Gourdes, and therefore some vse to steepe their Cucumbers, in Milke or Water, to cause them to growe the spædelier. On the other side, of old sæde better groweth the Bæte, Garden Cresses, Peniriall, great Marierum, and Coriander. In the Bæte this is onely obserued, that the sæde commeth not all vp in one yeare, but part the second yeare, and some the third: and therefore of a great deale of sæde, springeth but a little. Touching sæde, this is to be well seen to, that they be not to old and dry, that they be not mingled, or taken one for an other: old sæde in some is of such force, as it chaungeth the nature: for of old Colwort sæde springeth the Rape, and likewise of Rape sæde Colworts. Also that ye gather not your sædes to sone, nor to late. The verie time, as *Theophrastus* writeth,

Of seedes

writeth, is at the Spring, the fall of the leafe, and the rising of the Dogge: but not in all places and kinds alike. Of seedes, the soonest that spring are these, Basil, Arach, Nauen, Rocket, that commeth vp the third daie after the sowing, Lettuse the fourth daie, the Cucumber and the Gourd, the fifth daie, Purslin longer ere it come, Dill the fourth daie, Cresses, and Mustardseede the fifth daie, Beetes in Sommer, the sirth daie, in Winter the tenth or the twelfth, Leekes the xir. daie, sometime the xr. Coriander later: which if it be new (except it be thrust together) it groweth not at all. Penerial, and great Marierom, come vp after thirty daies. Parsely, of al other the longest before it come vp, appæring the fortieth daie after, or many times the fiftieth. You must also consider, that the weather in sowing is of great force: for the season being faire and warme, they come vp the soner. Some sorts seede one yere, and neuer after come vp: some againe continue, as Parsely, Smalledge, Leekes, Nigella, that being once sowed, come vp euery yere. Such as continue but a yere, presently vpon their seeding die: other spring againe after the losse of their stalke, as Leekes, Nigella, Onions, and Garlike: and commonly al such as put out from the side: and al these require dounging and watring. In sowing beside some thinke you must haue regard to the Moone, and to sowe and set in the encrease, and not in the wane. Some againe thinke it best from that she is foure daies old, till she be eightæne: some after the third, others from the tenth, til the twentieth: and best (as they all suppose) the Moone being aloft, and not sette.

What seed spring soone, and which slowlie.

The weather for sowing.

The Moone.

THRA. But now I praie you tell vs somthing of the ordering of the best Garden hearbs you haue.

MARIVS. Some deuide their Gardening time by the Moneths, as they do their other husbandrie.

THRA. I care not whether by Moneths, or other waies, but I would faine know the ordering of your Garden here: for I know in hot countries they garden all the winter long, but I am altogether for our coūtrie, whose order we must here folow.

MARIVS. In these parts they commonly begin their Gardening (if the weather be faire and seasonable) in the end of Februarie. At this time therefore the Garden being dounged,

The time for gardning.

ged, digged, raked, and cleanſed, they vſe to plant Sperage, and Rewe.

THRA. I pray you begin with *Aſparagus*, or Sperage, and the other pot hearbes, euery one in his order, & afterward with flowers, and Phiſike hearbes. Of pot herbes.

MARIVS. *Aſparagus* was wont to growe wilde, but now is brought into the Garden, it is called in Græcke ἀσπάραγος, in Italian, Spaniſh, and French, it is almoſt all one, the one calling it *Aſparago*, the other *Aſperge*, the Dutch men call it *Sperages* and *Spiritus*, becauſe it comes vp of it ſelfe: For the Garden Sperage they were not acquainted with. It is planted in two ſortes, either of the Sæde, or the Rote. They take of the ſæde as much as you may take vp with thræ fingers, and beſtowing it in little holes, euery two or thræ ſædes halfe a foote aſunder: they ſet them in rich ground in Februarie, and couer the ground with doung. The wædes that growe, muſt be well plucked away, after the fourtieth day they come vp as it were to one rote, and tangled together, the rotes haue ſundry long thræds, which they call the Sponge. In ground that is drie, the ſædes are to be ſet dæpe, and wel tẽpered with doung. In wet grounds on the other ſide, they are to be ſet ſhallow in top of the borders, leaſt the moiſture deſtroy them. The firſt yeere you muſt breake of the ſtalks that grow, for if you plucke them vp by the rotes, the whole ſettes will follow, which are to be preſerued for two yeere with dounging and weeding. All the yeeres after, you muſt not gather them in the ſtalk, but pul them from the rote, that the rotes being opened, may the better ſpring, which except you doe, you hurt the Spring. Him that you meane to kæpe for ſæde, you muſt in no wiſe meddle withall, after, burne vp the buſſhes, and in Winter doung well the rotes with doung and aſhes, they are planted alſo of the rotes, which after two yæres you muſt remoue into a warme & well dounged ground. The trenches where you meane to ſet thẽ, muſt ſtand a foote a ſunder, and a ſhaftman in depth, wherin you muſt ſo lay your ſpõges (as being couered) they may beſt growe: but in the ſpring before they come vp, you muſt loſe the earth with a litle Forke, to cauſe them the better to ſpring, and Aſparagus.

to

to make the rotes the greater. *Cato* woulde haue you to rake them, but so, as you hurt not the Rotes, and after to pull the Plant from the Rote: For if you otherwise breake, the Rote will die, and come to nothing. But you may so long crop it, till you see it begin to growe to seede; in which yeere for the Winter time, you must according to *Catoes* minde, couer it with straw, or such like, least the cold do kill them, and in the Spring open it againe, and doung it well. Some thinke, that the first yeere it is needeleſſe to doe any thing to the Plant, but onely to weede it. From the Rotes, which they call the Sponges, there springeth first certaine buddes with crompled knoppes, very good and pleasant for Sallets: which if you suffer to grow, it straightway busheth forth with braunches like Fennell, and at length grow to be prickly: after it hath floured, it beareth a Berry, first green, and when it is ripe red. If you would haue Sallets of *Asparagus* al the yeere through: when you haue gathered the Berries, open the Rotes that runne aloft by the ground with digging, and you shall haue the Rotes send forth newe buds out of hande. It is thought, that if you breake to pouder the horne of a Ram, and sowe it, watring it well, it wil come to be good Sperage. In the Spring time they make a very good Sallet, being sodde in water, or fat broth, till they be tender: for if you seeth them too much, they will waste away. When they be sod, they dresse them with Vineger, Oile, Pepper and Salte, & so eate them: or as my freende William Prat very skilfull in these matters telleth me, they cut them in small peeces like Oise, and after they haue parboiled them, butter them with sweete butter, a little Vinegar and Pepper.

THRA. You haue very well shewed me the ordering of *Asparagus*, I pray you go forward to Rewe.

Rue.

MARIVS. Rewe, which the Greekes call ῥυτὰ, the Latines *Rutam*, the Italians *Rutache*, the Spaniards *Ruda*, the Frenchmen *Rue de gardin*, is planted at the ende of February, or in March, prospering best in drie and Sunnie groundes, it abhorreth both water and doung, which all other herbes most delight in, it most delighteth in ashes: and where al other plantes will spring of the seede, this they say will neuer do it.

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The branches being slipped off, and set in the spring, will verie well growe, but if you remoue the old rote, it dieth: it delighteth in the shaddowe of the figge tree, and being stolne (as they say) it prospereth the better: it is sowed with cursing, as Cummin, and diuers other, and can not abide the presence of an vncleane woman.

THRA. I see good Lettuse here, I pray you how doe you order it:

MARIVS. Lettuse is called in Dutch Lattich, in French *Laictue*, in Greeke θρίδαξ. in Italian *Lactuca*, and so in Latine, in Spanish *Lechugas*, whereof besides the wilde, there are three kinds, one crompled, which *Columella* calleth Cæcilia, and Spanish Lettuse, of the countries where it most groweth, and is greatest esteemed, in Dutch called Krauser Lattich, in French *Crespue*, the other Cabbedge Lettuse, in Dutch Knopf Lettich, in French *Laictue testue*, of *Plinie* called *Laconica*, and *Sessilis*, bicause it groweth round like an head, or an apple. The third sort is called *Rotunda*, because it groweth in compasse vpon the ground. Lettuse.

THRA. But how come you to haue so good Lettuse, and how do you order them?

MARIVS. At the ende of February, or in the beginning of March, we vse to sowe it, that it may be remoued about Aprill or Maie. In hot countries as *Palladius* telleth, they sowe it in January, or in December, with intent to remoue it in Februarie: but you may sowe it at any time of the yeere, so the ground be good, well dounged, and watred. When you remoue them, the rotes must be pared and rubbed ouer with dung, and such as be alreadie planted, their rotes must be bared and dunged: they loue a good ground, moist & well dunged, they spread the better (if you set by them the Rape) or when they begin to stalke, the stalke being tenderly clouen, you lay vpon it a clod or a tileshard: they will be white, if you sprinkle them often with sand, or tie sande within the leaues, and both tender and white you shall haue them. If two daies before they be gathered their toppes be tied vp, they will be round and Cabbedged. If the rote being remoued when it is growen a handbrode in height,

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be pared and ſmered with freſh Cowe doung, and earth caſt about it, be well watered, and when it groweth hie, the toppe be cut, a potſharde laied vppon it, the ſweeter alſo they will be, the more you reſtrain the ſtalke from ſhoting vp, which muſt as I ſaied, be kept down with ſome ſtone or weight, that they may ſpread the better. If the Lettuſe chaunce by reaſon of the badneſſe of the ſoile, the ſeede, or the ſeaſon, to ware hard, the remouing of it will bring it againe to his tenderneſſe: it wil haue ſunderie and diuers taſtes, if taking a Treddle of Sheepe, or Goates doung, and hollowing it cunninglie with an Aulle or a Bodking, you thruſt into it the ſeede of Lettuſe, Creſſes, Baſill, Rocket, Smallage, Percely, and Radiſh, and after wrapping it in doung, you putte it into verie good ground and water it well. The Percely, or Smallage goeth to rote, the others growe in height, keeping ſtill the taſt of euery one. *Conſtantine* affirmeth Lettuſe to be a moiſt and a cold hearbe, a quencher of thirſt, and cauſer of ſleepe, and that being boiled, it nouriſheth moſt, and abateth Lecherie, for which the *Pythagorians* do call it *Eunuchion*. *Galen* him ſelfe, the Prince of Phiſitions doth greatly commend it, who in his youth did alwaies vſe to eate it rawe, & after in his elder yeeres boiled, wherby he kept his bodie in good temperature.

Endiue.

Endiue, in Latine *Intubum*, or *Intubus*, not vnlike to Lettuſe, ſome call it Garden Succorie, the Dutchemen and common ſorte *Endiuiam*, the Italiansand the Frenche *Cicoriam*, the Spaniardes *Endibia*, it is ſowen as other Garden hearbes in march, it loueth moiſture and good earth, but you muſt make your beddes when you ſowe it the flatter, leaſt the earth falling awaie, the rootes be bared: when it hath put forth fower leaues, you muſt remoue it vnto well dounged ground: that which is ſowen before the kalendes of Julie, doth come to ſeede, but that which is ſowen after, ſeedeth not. You muſt ſowe that which you would haue to ſerue you in Winter in October, in warme ſtonie places for Salletes in Winter, they vſe at this day when his leaues be out, to fold thē vp together, and tie them rounde in the toppe with ſome ſmall thing, couering them with ſome little earthen veſſell, the rootes ſtill remaining to nouriſhe them withall: thus doing, they will

growe

growe to be white and tender, and to lose a great part of their bitternesse. It is said, that they will be white, if they be sprinckled a few daies abroad, and lyng vpon sand, be washed with the raine: And thus is Endiue with his encrease preserued all Winter. Some there be, that contenting themselues with lesse charges & labour, do only couer them with earth, others againe with strawe: this order of Wintering of it, is now in euery place growen to be common.

THRA. I see also in this pleasaunt Garden Colworts, that we Countrey folks be so well acquainted with. Colwoorts

MARIVS. It is méete my Garden should want that, which as you know *Cato* preferreth before all other herbes, in describing the wonderfull properties and vses thereof: and this place I onely appoint for such common Pot herbes, as Colworts, Béetes, Endiue, Onions, Rapes, Nauenes, Lékes, Carrets, Raddish, Garlécke, and Parsneps: the worthier sort I place by themselues, and as the nature of euery one requireth. Colworts is commonly called in Latine *Brassica*, or *Caulis*, in Gréeke κεφαλὴ, in French *Choux*, in Italian *Caule*, in Spanish *Verza*, in Dutch *Koil*. The old writers made diuers sorts of it, as at this day there be. One sort with great and broad leaues, a big stalke, and very fruitfull. This sort is commonly knowen, which beyng the pleasanter in Winter, when it is bitten with the frostes, is sod with Baken, and vsed in Porredge. The tender part of the top beyng a little boiled, is serued for sallets, dressed with oile and salt. The second sort with the crompled leafe, of the resemblance that it hath to Smallage, is called *Selinoeis* or *Apiaria*, of the common people crompled Col, or wrinckled Col. The third sort which is properly called *Crambe*, hath a smaller stalk & leafe, smooth, tender, and not very ful of iuice. The fourth sort is the great Cabbedge with broad leaues and a great head, called in Dutch Kappes, in French *Cheux Cabuz*, of the olde writers *Tritiana Brassica*, and this kind is onely most set by. In Germanie there is one kind of thē that they call Lumbardie Colwort, or Sauoy Colwort, sweéter than the other, and not able to endure the Winter: and another with very broad leaues crompled, and full of wrinckles,

wrinckles, but a great deale blacker, which the Italians call *Nigrecaules*, and the Latines *Nigra Brassica*, of the number of those that they call commonly redde Coll, of the olde writers *Marucina Brassica*. There are besides other sortes, taking their names of the Countrey where they growe, as *Aricina* and *Cumana*. The best time for setting and sowing of Collworts, is after the Ides of Aprill. In cold and rainie Countries, the ofter it is dunged & raked, the better a great deale will the Collworts be: some vse to sowe them about the Kalends of March, but then the chefest of it goeth out in leafe, and when it is once cut, maketh no good stalke for the Winter after: yet may you twise remoue your greatest Col, and if you so do, you shal haue both more seed, and greater yeld: for it so aboundeth with sede as it is sowed with no lesse aduantage than Rape seede. For the making of oile, Collworts may be sowen all the yere long, but chiefly in March after it is sowed, it appereth within ten daies, except your sedes be old and dry, for old sede will growe to Rapes, as old Rape sede will to Collworts. Some say it prospereth best in Salt ground, and therefore they vse to cast vpon the ground Saltpeter or ashes, which also destroieth the caterpiller: it is remoued in June, chiefly when it hath put forth fiue leaues, and that when the weather is rainie, so that you couer the rote before with a little fresh dung, and wrap it in seawéede, and so set it. More diligence is to be vsed about the Cabbedge: it must be sowen in March in the full of the Mone, that it may remaine in the ground two Mones, and in Maie you must take them vp, and set them againe two foote a sunder. The ground must be well digged where you set them, and as fast as they growe, the earth must be raised about them, so that there appere no more than the very tops of them: for to cause them to grow faire and great: you must as oft as you remoue them, banke them vp with earth about them, that nothing but the leaues appere. And thus you must often do to all the kinds of them, the hoare frosts make them haue the greater swetenesse. The Vineyards (they say) where Collworts growe, doe yeld the worser Vines, and the Coll corrupteth the Wine.

THRA. I pray you proceed with the rest of these pot herbs.

MARIVS.

MARIVS. You ſée hereby Spinage, ſo tearmed (as you may know) of the prickly ſéedes, called in Latine *Spinacia*, and euen ſo in Italian, Spaniſhe, Frenche, and Dutche: it is ſowen as thoſe before, in March, Aprill, and ſo till September: if it may be well watered, it commeth vp in ſeuen dayes after the ſowing, you ſhall not néede to remoue it. The ſéede muſt preſently after the ſowing be couered, and afterward wel wéeded: it refuſeth no kind of ground, but proſpereth in euerie place, you muſt often cut it, for it continually groweth, it is to be boyled without any water, where in the boiling it doth yéeld great ſtore of iuyce, and contenting it ſelfe with his owne liquour, it requireth none other. Afterwarde, being beaten and ſtirred with the Ladell, till the clammineſſe be gone, it is made vp in little balles, the iuyce ſtrained out and boyled vppon a Chafyndiſh with Dyle or Butter, ſome adde thereunto Uergius, or the iuyce of ſoure Grapes, to make the taſte more tarte. I ſhew you in order as you ſée, all my Kitchin hearbs, now followeth Sorell, called in Latine *Acetoſa*, in Italian likewiſe, in Spaniſh *Romaza*, in French *Oxella*, in Dutch *Surick*, of the ſower thereof. There are ſundrie ſorts of it, we haue at this day two kinds, the Garden Sorell and the wilde, which are pleaſant both in Broth and Sallettes, and of this hearbe the wylde ſortes are both ſower in taſte, and ſmaller in leafe: it is ſowed as all other potte hearbes are, and it groweth of it ſelfe in meddowes and Gardens. Cummin and Coriander require well ordered ground, they are ſowed in the Spring, and muſt be well wéeded. Cummin is called in Gréeke κυμινον, in Latine *Cuminum*, and almoſt like in all other languages: it is ſowed beſt (as they thinke) with curſing and execration, that it may proſper the better. Coriander called in Gréeke κορίον ἢ κορίαννον, in Latine *Coriandrum*, and in almoſt by the ſame name in all other tongues, doth beſt proſper when it is ſowed of ſéede that is oldeſt. Smalledge and Parſley called in Gréeke σέλινον πετραῖον, and alſo *Petroſelinon*, in Latine *Apium*, *Petroſelinum*, and *Apium hortenſe*, in Italian *Apto domeſtico*, and *Petroſello*, in Spaniſh *Peterſillie* or *Peterlin*, it is ſowed at the *Æquinoctiall* in the Spring time, the ſéede beaten a little, and made vp in round

Spinage

Sorell.

Cummin and Coriander.

Smalledge or Parſley.

pellettes: we call it *Æquinoctiall*, when the night and the daies are of equall length ouer all the world: that is, when the ſunne, the captaine and auctheur of the other lights, the very ſoule of the world, doth enter into the ſignes of *Aries* and *Libra*. It is thought to proſper the better the older the ſeede is, and to ſpring the ſooner: it commeth vp the fiftieth day, or at the ſoneſt the fourtieth day after it is ſowen: when it is once ſowen, it abideth a long time, it reioyceth in water or wette. Fenell in Greeke μάραθον, in Italian *Fenochio*, in Spaniſh *Hinozo*, in Frenche *Fenoil*, in Dutche *Fenchel*, is ſowed in the beginning of the Spring in hotte ſunnie places, ſtonie ground, or any ground: being once ſowen, it ſpringeth euerie yeere. Annile in Greeke ἄνισον, in Latine *Aniſum*, ſo knowne in moſt tongues, as Cummin, and Coriander, requireth a ground wel ordered and dreſſed. Dyll in Greeke ἄνηθον, in Latine *Anethum*, in French and Italian almoſt ſo, in Spaniſh *Eneldo*, in Dutch *Dyll*, endureth and abideth all kind of weathers, but delights moſt in warme ground: if it be not well watered, it muſt be ſowed thinner. Some neuer couer the ſeedes when they ſowe them, ſuppoſing that no Bird will meddle with it, it commeth vp alſo of it ſelfe as Fenell doth. Cheruyll in Greeke χαιρέφυλλον, in Latine *Cerefolium*, in Dutch *Kerbel*, in Italian *Gingidia*, in French *Cerfueil*, deſyreth a good ground, moyſt, and well dounged: it is ſowed with the reſt in cold places. In this ſame moneth they alſo ſowe Beetes, though you may ſowe them when you will at anie other time of the yeere as Spinage, it is a common countrey hearbe, they call it in Greeke τεῦτλον, in Italian *Bietola*, in Spaniſh *Acelga*, in Dutche *Beett*, or *Mangelt*. No Garden hearbe hath greater leaues, ſo that with due ordering, it groweth like a young tree. It is called *Beta*, becauſe when it ſeedeth, it is (as *Columella* affirmeth) to the likeneſſe of the Greeke letter β. There bee two ſorts of them, the white and the blacke, the ordering of them is after one ſort: it is ſowed as Colworts, Sorell, and Radiſhe are, in Marche, Aprill, or Maye. Some thinke the beſt time for ſowing it, is while the Pomegranate doth flowre, it may be ſowed neuertheleſſe as Lettuſe, Cols, and diuers others, at any time of the Sommer.

Fenell.

Dyll.

Cheruile.

Beetes.

The

The ſæde, the older it is, the better it is to be ſowen, as are the ſædes of Smallage, Parſley, Garden Creſſes, Sauerie, wilde Marierum, and Coꝛriander, though in all other the neweſt be beſt. It commeth vp in Sommer the ſirth day, in Winter the tenth after the ſowing, it loueth a moiſt, a rich, and a mellow ground, you may remœue it when it hath put foꝛth fiue leaues, if your ground like well to be watred: if it be dꝛie grounde, it muſt be ſet in the ende of the Sommer, as I haue ſaide of Colewoꝛtes, though it make no great matter at what other time you doe it. When you remœue it, you muſt rubbe ouer the rœte with newe doung. This is pꝛoper to the Bœte, that his ſæde come not all vp together, but ſome the yœre after, ſome the third yœre: and theꝛefoꝛe of a great deale of ſæde, there is at the firſt but a little ſhewe, it groweth the bꝛoader and the whiter, if when it is ſomething growen, you lay vpon it Tyle ſtones, oꝛ ſuch like, to cauſe it to ſpꝛead, as I ſpake befoꝛe of Lettuſe. Garden Creſſes in Grœke νάπυμον, in Italian *Naſturtio*, and *Agretto*, in Spaniſh *Maſtuerzo*, in French *Creſſon, de gardin*, in Dutch *Kerſs*, are ſowed both in the ſpꝛing, and at the fall of the leafe, it commeth vp the firſt day after it is ſowen, and dꝛinketh away the moyſture from ſuch hearbes as growe nœre him, mingled with other hearbes, he careth not what weather come, and theꝛefoꝛe pꝛoſpereth both as well in Winter as in Sommer: if it be ſowen with Lettuſe, it commeth vp excœdingly, it delighteth in moiſture, which if it want, it will do well enough: in watrie places it groweth of his own accoꝛde, as about *Padelbor*, a Towne in *Weſtphalia*, it groweth in great abundance in the Riuer, and theꝛfoꝛe is called of ſome water Creſſes: it was called in the olde time *Siſimbrium*. The bꝛanches when they waꝛe olde, are netted togither with white heary ringes. Garden Poppy, called in Grœke μήκων κῆπος. in Latine *Paupauer ſatiuum*, is thought beſt to grow, where olde ſtalkes haue bœn burnt, it is ſowed in warme places with other pot hearbes. Muſtardſœde in Grœke σινάπι. in Latine *Sinapi*, in Dutch *Seneff*, in Italian *Senape*, in Spaniſhe *Moſtaza*, in French *Seneue*, there are two kindes, white and blacke, it is beſt to be ſowen in the ende of Sommer, and againe in March.

Garden Creſſes.

Garden Poppy.

Muſtard ſeede.

Where it is once ſowen, it is hard to ridde the ground of it againe, becauſe the ſeed doth ſtill growe as it falleth. It loueth to growe vpon dounghils, and caſt bankes.

THRA. I ſee you haue very faire Radiſhes here.

Radiſh.

MARIVS. Nothing ſo faire as I haue had them, for where as they delight in the Sunne, and in warme ground, my Gardners haue here ſet them in the ſhadowe. The order of them is to be ſet in very good ground, and lying vpon the Sunne: ſome ſayth, it doth not greatly care for doung, ſo it may haue Chaffe ſtrawed vpon it. When it is come to ſome growth, they muſt be couered with earth, for if it floriſh once aboue the ground, the rootes will neuer be good, but hard and full of pithe. It is called Radiſh, becauſe it exceedeth all other rootes in greatneſſe. *Plinie* writeth, that he ſawe at *Erford* in Germanie, Radiſhe as big as the bodie of an Infant. It is ſowed twiſe in the yeare, in Februarie or Marche, the Moone being in the wane, leaſt it growe too much in leaues, foure fingers diſtant one from the other: and againe in Auguſt, which is the beſt ſeaſon for them. Thoſe that you ſet after the tenth of June, will neuer ſeede, the like is to be obſerued in all other ſeedes, it commeth vp commonly the third day after it is ſowen: in hote and Southerlie Countreis, the weather being faire, it groweth ſone to ſtalke, and quicklie ſeedes. The leaues as they growe, muſt ſtill be trampled downe and troden vpon, whereby the roote ſhall growe the greater, otherwiſe it florifheth with leaues, and giueth encreaſe to the leafe, & not to the roote: the leſſe and the ſmother the leafe is, the mileder and the ſweeter is the roote: cold as ſome ſay, doth further the goodneſſe of them. They ſay they will be verie pleaſant, if the ſeede be ſteeped in Meedth, or in the iuice of Raiſins: they ware ſweete with colde as the Rape doth, and their bitterneſſe is taken away with Wine, and therefore ſome would haue Radiſhes watred and nouriſhed with ſalt waters: being ſodde, they come to be very ſweete, and ſerue the turne of Rapes, giuing faſting, they prouoke vomite, they are hurtfull to the Wines and to the Teeth. Radiſh eaten at firſt, is a good preſeruatiue againſt poyſon: eaten before meate, it breaketh winde, and prouoketh

prouoketh vrine: and after meate it loseth the belly, it is called in Greeke ῥαφανος. in Latine *Raphanus*, in Italian *Raphano*, in Spanish *Rauano*, in French *Raue*, in Dutch *Retich*.

THRA. There is an other kinde of them, that the Dutch men call *Merrettich*, I take it to be that which the Romanes called *Armaracia*, called commonly in Italy *Ramaracia*, the first letter misplaced.

MARIVS. You say well, but this is more full of branches, greater in leaues, thinne in bodie: the leaues are not vnlike to the former Radish, but that they are a litle sharper and longer, and the roote slenderer, and therefore there are some that denie it to be *Armaracia*: but here let the Phisitions contend. *Theophrastus* maketh mention of sundry sorts of Radish, This kinde of Radish hath a wonderfull byting taste, a great deale more than Mustardeseede, and fetcheth teares from the eies of them that eate it: it is set and planted in this sort. The roote is cut in a great number of peeces, whereof euery peece prospereth: for if you plucke vp this kinde of Radish by the rootes, you may cut off a good quantitie of the roote, and diuiding them into small peeces set them, setting the olde roote againe by himselfe, and they will all growe and prosper very well.

THRA. Yea, haue you gotten the Rape? Hitherto I thought he had onely belonged vnto vs, for we vse to sowe them after the Sunne hath beene at the highest, and immediately after, ouer other Corne, for the sustenance both of man and beast.

MARIVS. You doe well, and we sowe it now in Maie, and in watry ground sooner, and in some places in Julie. There are diuers sorts of them, some of them rounde, some growe all in length, and are most pleasant in taste, as at *Binge*, and in the Countrey of *Bauar*. Some againe of the quantitie of a mans head, and of a hundred pound weight: but the smallest sort is the sweetest. There is an other kinde of Rape that they vse to sowe, which carieth his seede in little coddes, and is chefely planted in Germanie for to make oyle of, the which you the other daye spake of, it is called in Greeke ναπυς, in frenche *Raue*, in Italian *Rapo*, in Spanishe *Naba*, in Dutche *Ruben*, Rapes.

The little Rape.

There is also another wilde kind called *Rapunculus*, that groweth halfe a yarde hie full of leaue, and tender topped. This they gather in the Spring time, before the stalke be sprong vp, and pulling it vp by the rootes, doe vse it in Sallettes, supposing it to be a wilde kinde of Rape. The Nauens also called in Greeke ναυπακι, in Latine *Napus*, in French *Nauet*, in Italian *Napo*, in Spanishe *Nabicas*, in Dutch *Stockruben*, may be counted in the number of Rapes, for Rapes in some grounde change into Nauens, and in some grounde, Nauens into Rapes. These also loue to growe in a well watred, mellow, and a rich ground: though such as growe in Sandie and barraine ground, proue often the sweetest in eating. They vse to sowe them in March; and in some places before, as also in August. Parsneppe in Greeke παστινακι, in Latine *Pastinaca*, in other tongs almost as in Latine, is verie pleasant to be eaten, and requireth a fatte and rich grounde, and deepe digged, wherby the roote may haue rome enough to growe in: it is sowed and set in the spring, and in the ende of Sommer.

Nauens.

Persnep.

Redde and yellowe Carrets.

THRA. You haue here also in this Garden red Carrets.

MARIVS. I haue so. Yellowe Carrets is called in Greeke σισαρον, in Latine *Siser*, in French *Cheruille*, in Italian *Sisero*, in Spanishe *Chirinias*, in Dutch *Querlin*, I thinke you know it. *Plinie* writeth, that *Tiberius* was so in loue with this roote, that he caused Carrets to be yerely brought him out of Germanie, from the Castell of *Geldiba* standing vppon the Rhine. It delighteth in colde places, and is sowed before the kalendes of March, and of some in September: but the thirde and the best kind of sowing as some thinke, is in August. There is also wilde Carret, a kinde of Parsnep, in Greeke σταφυλινος, in Latine *Daucus*, in Italian *Dauco*, in Frenche *Carote sauage*, in Dutch *Woortzel*, there are that suppose it to be the yellowe roote, that is so common in Germanie, they are to be sowed in March. It is general to Rapes, Radishes, Parsneps, Carrets, Onyons, and Leekes, that they be well troden vppon, or kept cut, to the ende the rootes may growe the greater. Of Leekes there are two sortes, the one called *Capitatum* πρασον, and the other *Sectiuum*, which they vse alwaies to cutte close by the ground.

Leekes.

ground. The headed, or sette Leeke, in Greeke κεφαλωτον, in Latine *Capitatum*, in Italian *Porro capitato*, in Spanishe *Puerro con Cabeza*, in Dutch *Lauch*, in Frenche *Porreau*, the other Leeke in Latine *Sectile*, in Greeke τμητον, in Dutche *Schnitlauch*, beside the often raking and dounging, must be watred as oft as you cut it downe. The seedes in colde hotte Countreys, is sowed in Januarie or Februarie, and in colder places, in Marche, to cause it to growe the fayrer and the better. They vse to knit vp a good deale of seede together in thinne Lynnen clothes, and so to lay them in the grounde: but to make them greater headed, when it hath well taken roote, they vse to plucke it vp by the blades, and raise it so, that as it were hanging and borne vp by the earth, it is forced to fill the emptie place that lyes vnder it: the blades and the rootes cut off, they vse to set the heads, vnderlaying them with a Tileshard, that when as they are not able to runne downe in length, they should be driuen to growe in bignesse and breadth. The Leeke delighteth in good ground, and hateth watry ground: sowed in the spring, it must be remoued or set againe after Haruest, that they may be the greater, the earth must be continually losed about it, and they must be pulled and rayled vp, as I sayde before: if when you remoue them, you make in the heades of euery one a little hole with a peece of a Reede, or any thing except Iron, and thrust therein a Coucumber seede, they will growe to a wonderfull greatnesse: some vse in steade of Coucumber seede, to put in Rape seede. To haue very large and great Leekes, you must hollowe a Treatle of Goates doung, and fyll it full of Leeke seede, for the little sprout at the fyrst restrayned, will runne altogeather in one, and so come forth of the grounde: and thys as *Hieronimus Cardanus* wryteth, hath beene often tryed to bee true. They shall not sauour of Leekes or Onyons, that haue eaten Cummin after. It commeth vp the tenth daye after the sowing, and lasteth two yeere: the first yeere it contenteth it selfe onely with bearing of leaues, the next yeere it riseth in a long stalke hollowe within, the toppe garnished with rounde knoppes of flowres. The Onyon, in Greeke κρομμυον, in Latine *Cepa*, or *Cepe*, in Italian *Cipella*, in Spanishe *Cebolla*, in French Onyons.

French *Oignon*, the nert neighbour to the Lẽke, is also of two kinds, the one kind called *Capitatum*, that groweth to head, the other *Fissile*, that without anie head only flowrisheth in blades, and is often geathered as Lẽkes are, and therefore onely is sowen and not set in Februarie or March in faire weather, and in the wane of the Mone: it delighteth in ritch ground, well digged and dounged, and therefore *Columella* would haue the ground well fallowed, that it may be mellowed with the winter frosts, and after dounged, after well digged againe, and the roots and weeds cast out, layd out in beds and sowed: it is called *Fissile*, because it is parted and diuided below, for in the winter it is left with his toppe naked: in the spring time the blades are pulled off, and other come vp in their places. The heads are set, and if you plucke away the tayles and the outgrowings when you set them, they will grow to be verie great. Twentie daies before you set them, digge the ground well, and lay it drie, and so shall they prosper the better. The heads are set in *Autume*, and grow to sẽde as other plants do: if you meane to geather the sẽdes, when the stalke is growen, you must prop it vp with little stickes, that the windes shaking off the stalke, shatter not the sẽdes, nor breake the stalke: which sẽde you must geather before it be all blacke, for the blackneſſe is a true signe of the full ripeneſſe: if you will not haue it sẽde but head, plucke off the blade still close by the ground, so shall all the maintenance go to the roote. Among all other hearbes, only the Onyon is not subiect to the force of the Mone, but hath a contrarie power, for it wareth in the wane of the Mone, and decreaseth in the encreaſe of it: yet there are that hold opinion, that if you sowe them in the wane, they will be the smaller, and sowrer, and in the encreaſe, they will be the greater, and the milder. The red Onyon is more sharp then the white, they are best preserued in Barley Chaffe, if first you dippe them in hote water, and after dry them in the sunne, till they be throughly dry. They are of the common people thought to last longest being hanged vp in the smoke, for the kinred it hath with the Onyon.

Fisile.

Onyons.

Garlicke. I proceade to speake nert of Garlicke, called in Grẽcke σκόροδον, in Latine *Allium*, in Italian *Aglio*, in Spanishe

Aio,

Aio, in Dutch *Knobloich*, in French *Aux*, it groweth with a blade like the Onyon, but not hollow, the ſtalke round, and the flowres in the toppe in a round tuft where the ſæde lieth. Garlicke groweth both of the head and the ſæde, as the Onyon and other of this kind doth. It is commonly ſowed in Februarie or Marche, according to the diſpoſition of the weather, as the Onyon is. It would be ſette in the vppermoſt part of little narrow ridges, the Cloues being diſtant foure or fiue inches one from the other, and not verie dæpe. After, whē the Cloues haue put forthe the little ſtrings, or when theyr blades are come vp, they muſt be well racked, for the oftner ye do ſo, the greater they will be: but if you will haue the heads the greater, before it growe to ſtalke, you ſhall winde and wreathe the greene blades togeather, and treade them to the grounde, for that continuall treading vpon them will make them the greater. In October the Cloues muſt be plucked aſunder, and ſet in rowe vpon hye borders, that they may ſkape the danger of the winter ſtormes. They ſay the ſent of them will ceaſe, if you eate after them the rote of Bætes toſted at the fire: thus ſayth *Plinie* out of *Menander*.

THRA. What hearbe is that yonder that commeth vp ſo hie as a man may make a ſtaffe of the ſtalke, the leaues large and rounde, the flowre in ſhape ſeeming to compare with the Roſe?

MARIVS. It is Hollioke, or Garden Mallow, in Græke Μάλαχε, in Latine *Malua hortenſis*, in Dutch *Peppell*, in Italian and French, almoſt as in Latine. Mallowes.

THRA. What, the ſame that *Horace* taketh to be ſo wholſome for the bodie? and which of *Heſiodus* and *Martial* is ſo highly commended?

MARIVS. The very ſame, and alſo which is more wonderfull, in it the leaues turne about with the ſunne, ſo that it may ſerue in ſtead of a Dyall, declaring by the turning of his leaues, what time of the day it is, though the Sunne do not ſhine, which the Philoſophers thinke to be done, by the drawing of his moyſture. In *Africa* as *Plinie* writeth, it commeth in ſeuen moneths to be like a young trée, and ſerue well for a walking

walking staffe. It is sowed in October, or in the ende of the sommer, as also at other times, that by the comming on of Winter, it may be restrained of his high growth: it reioyceth in ritch and moyst ground, and must be remoued when it commeth to haue foure or fiue leaues, it groweth best when it is young: when it commes to be greater, it dies in the remouing. We vse it both for the potte and for sallettes, the taste is better when it is not remoued: you must sowe it but thinne for growing too rancke, and in the middest of them, you must lay little cloddes or stones, it requireth continuall raking, and maketh better the ground where it growes.

THRA. I marueyle whether you sowe Purcelayne, sith it groweth wilde abroade.

Purcelaine.

MARIVS. The Grecke call ἀντήλιον, the Latines *Portulacan*, with the Italians it hath the same name, in Spanish *Verdolaga*, in Frenche and Dutche *Porchelle*, it is sowed in Gardens, and well ordred doth growe the better, and spreadeth the farther, it hath a blacke seede growing in little greene cuppes.

THRA. Buglose that the Grecke call βούγλωσσον, the Latines *Buglossum*, the Dutchmen *Ochsenzung* or *Burretsch*, the Frenchmen *Borague*, the Italians *Borache*, the Spanyardes *Boraie*. Is not this it that I see here with the faire blewe flowre, and a stalke a foote long, and full of branches?

MARIVS. Buglose is at this day with the Poticaries called Borage, though they differ something in the flowre, and in verie deede they are two sundrie hearbes, for some call the common Borage, the lesser Buglose, and the greater Buglose, is thought to be that which *Dioscorides* calleth *Circium*, the true Buglose, the flowres of both sortes are vsed in Sallettes, and in wine, because it maketh the heart merrie, and therefore is called in Greeke εὐφρόσυνον, that is to saye, gladnesse, the leaues are also vsed in dressyng of meates, it is sowen about Marche, and once sowen, it will neuer away, there is also a wild kinde of it.

THRA. I pray you goe forwarde, and tell vs some thing of Straberries, which here grow with great plenty and beautie,

tie helped as it ſeemeth with good ordering.

MARIVS. They are ſo, for we vſe to bring rootes out of the woodes, which being ſet and planted in the Garden, proſper exceedingly two or three yeeres together: and after, we either remoue them againe, becauſe they ware wilde, or ſet the wilde in their places: and ſo haue we them to yelde their fruite twiſe in a yeere, in the Spring, and in the ende of Sommer. And although it groweth of it ſelfe in ſhadowy woods in great plentie, as if it delighted in ſhadowe of Trees, yet being brought into the Garden, it delighteth in ſunnie places, and good ordering, yelding a great deale more and better fruite: it creepeth vpon the ground without a ſtalke, with ſmall ſtringes comming from the roote, with a white flowre, and a leafe like a Trefoile, indented about. The berries, which is the fruite, are redde, and taſte very pleaſantly, the Dutchmen call them *Erdbern*, the Frenchmen *Freſes*. There is an other fruite that groweth ſomething higher, whoſe berrie is alſo like the Straberie. *Dioſcorides* ſeemeth to call it *Rubus Idæus*, the Bryer of *Ida*, becauſe it groweth in great abundance vpon the mountaine *Ida*. It is not full of prickles, as the other brambles are, but ſoft and tender, full of branches & whitiſh leaues, it beareth redde berries, ſomething paler than the Straberie, and very pleaſaunt in taſte. The Grecians call it Βάτος ἰδαία and ῥάμνος, the Dutchmen *Imberen*, the Frenchemen *Framboſas*.

Straberries.

Raſpes.

THRA. What is that groweth yonder, a yard in height?

MARIVS. It is commonly called Liqueriſe, in Greeke γλυκύῤῥιζα, in Latine *Dulcis Radix*, in Italian *Regolitia*, in Spaniſh *Regaliza*, in Frenche *Recliſſe*, in Dutch *Clarits*, or *Suſſholts*.

Liqueriſe.

THRA. I did not thinke to haue found it here. I heare it groweth very plentifully about the Peine, I would be glad to heare howe you doe order it, for it hath a roote for the ſweetenelle thereof (whence it taketh his name) very commendable.

MARIVS. It is ſet of yong ſpringes of the roote: as the Hoppe is, in drie light ground, and ſunnie.

Smal Reazins.

THRA. What ſay you to ſmall Reazins, called in Latine *Ribes*

Ribes? do you thinke the old writers knew this bush?

MARIVS. That which we call at this day *Ribis*, and the Dutchmen *Saint Iohns pearle*, because about Midsommer it is garnished with read and rich berries, hauing a tarte taste, quenching thirst, cheefely, the raging and extreame thirst of feuers, and coling the stomacke, which the Apothecaries in Suger or Honie keepe all the yeere, is thought was vnknown to the olde writers: but nowe a common bush vsed for encloasing of Gardens, and making of Borders and Herbers: it will easely growe, but that it is somthing troublesome, by reason of his sharpe prickles to be bent about Sommer houses.

Hoppes.

THRA. You spake euen nowe of Hoppes, doe you set in these your princely Paradises, that plant that is so common with the Countrey man? for about vs they make great gaine of it.

Reade the perfect ordering hereof, in master Reynolde Scots book of Hoppe Gardens.

MARIVS. Tell you therefore, I pray you, howe they do vse it.

THRA. It is set of the yong shootes, as you tolde a little before of Liquerise, and that in the ende of Sommer: or if they feare a harde winter, in March. The sets or shootes are cut from the olde rootes, and are set in grounde well couered with doung and good moulde, and afterwarde hilled, and so suffered to remaine al Winter. In the Spring, the earth is stirred with Rakes, and not with Spades, and the hilles raised, and the ground rid of all hurtfull weedes. About Maie, certain powles are set vppe, vpon which the Hoppe climeth: all the spraye that springeth aboue the flowre, is commonly cut off. About September, or in the ende of August, the flowers or bels are gathered and kept to make Beere with: when the Hoppes are gathered, the remaines are cutte downe close to the grounde, and the hils being againe raised, are couered with doung. The toppes, and the yong buds that come first out in Aprill, are vsed to be gathered for sallets, and keepeth them from growing too ranke. But nowe I pray you go on, and returne to the description of your Garden. O what excellent Mellons, Pompens, Coucumbers, and Gourdes haue you here, I pray you tell in what sort you order them.

MARIVS.

MARIVS. Melons (which some, bicause they are fashioned like Apples, call Pomes) are of like kinde of Coucumbers, and so are the Pepons, which the Frenchmen call Pompeons. The Coucumbers, in Greeke σικυος ἄγριος, in Latine *Cucumer*, in Italian *Cucumero* or *Cedruolo*, in French and Dutch *Cocumbre*. They change to Pompeons, and Muskemillions, from which they onely differ in shape and greatnes: when they exceede in greatnesse, they become Pompeons, and when they grow rounde, they are Melonpompeons: all these kindes are called of some writers Melons. The Grecians call all the sorts, as well Coucumbers as Melonpompeons, by the name of Pompeons and Melons: though there are some that make a difference betweene Pompeons and Melons, neither doe the learned yet throughly agree vppon these names, nor can it be certainly saide what kinde the olde writers meant by Pompeons, and Melonpompeons. Pompeons doe creepe along vppon the ground with rough leaues and yellow flowre, and are pleasant to be eaten when they be ripe. The sweetest sorte of them they call *Succrino*, or Muskemillions. The Melonpompeons are supposed to spring first in *Campania*, being fashioned like a Quince. This kinde hangeth not, but groweth rounde lying vpon the ground, and being ripe, doe leaue the stalke. Some Coucumbers are called *Citrini*, of their yellownesse when they be ripe, and also *Citruli* or *Citreoli*, they growe all in length, and are spotted as the Citrons are: some be called *Marin*, and be called in Italian *Cucussa Marina*, the seede whereof is to be eaten before they be ripe: they are cut in peeces, and porredge made of them, not much vnlike in fashion to the Melon. There is also an other kinde of Coucumber of a huge compasse, almost as bigge as a bushell: the mowers and Harueste folkes in Italie, vse to carrie great peeces of them to the Field with them to quench their thirst. You must set all these kindes in March, the seedes must be set thinne, two foote one from an other, in watrie ground well dounged and digged, specially sandie ground: you must lay them in Milke, or Water and honie three dayes: and after drie them and sowe them, so shall you haue them very pleasaunt. They will haue a very

Coucumbers.

sweete

swete sauour, if their sædes be kept many daies among Rose leaues. Your Coucumbers shall be long and tender, if you set vnder them water in a broad vessell, two handfuls vnder them. They delight in water so much, as if they be cut off, they wil yet bende towarde it, and if they hang or haue any stay, they will growe croked, as also if you set oyle by them, which they greatly abhorre. The flowers being suffered to growe in Pipes, doe growe a wonderfull length. They loue not the Winter no more than doth the Gourde, whereunto they are almost like in nature, for the flowers, the leaues, and the claspers, are like of
Gourdes. them both: but the Gourde is more busie in climming, so that with hastie growth, it spreadeth quickely ouer the herbes and Sommer houses, running vp by the walles, and mounting vp to the very Tyles of the houses, hauing a great fruit of a monstrous bignesse, hanging by a small stalke, in fashion like a Peare, and græne in colour, although when it hath flowred, it will growe in what fashion you will haue it: they say, there hath bœne some of them nine foote in length. The round ones also growe to be vsed for great vessels: the rinde of the newe ones, is soft and tender, but of the old ones hard, whereof when the meate is out, trauailers make great bottels to carry drinke in. The Gourdes that are vsed to be eaten in Sommer, are sundry in shape, some are rounde, some long, some broad: and though the fashion be diuers, yet the nature is all one: for it is made by arte to growe in what shape you will, as in the forme of a crœping Dragon, or what you list, they are called in Grœk κολοκύνθα, in Italian *Zuma*, in Spanish *Calabaz*, in Dutch *Kuirbisch*, the French *Vne courge*. The sædes that the Gourde beareth next to the stalke (as *Paladius* saith) are longest, they in the middest rounde, and those that lie on the side, short, broade, and flatte: if you set the sharpe ende of the sæde downewarde, as *Columella* saith, you shall haue them both greater Gourdes and Coucumbers. It delighteth in a moist, ritch, well dounged, and wel watred ground. That which groweth without water, brings the pleasanter fruite, and that which hath water enough, nœds the lesse loking to. The flowers where they be set, must be digged a foote and a halfe dœpe, the thirde parte

whereof

whereof must be filled with strawe, and then with good ritche mould: it must be filled to the middest, then the seedes being set, must be watred, till they be sprong, and after, earth laid to them still as they growe, till the Furrow be filled. They must be set thinne, two foote a sunder, it commeth vp in fire or seuen daies after the setting. Those that are sette in drie ground, must bee verie well watred, therefore they vse to set by them earthen pots ful of water, with ragges or clouts in them to water them. When they be a little growen, they must haue helps set by them to climbe vppon, the longer they be, the better the meate is. You must beware there come no woman nere where you set them, for their presence doth greatly hurt them. Those that you kepe for seede, you must suffer to remaine vpon the stalke till Winter, and then geathering them, and drie them, either in the sunne, or in the smoke, for otherwise the seede will rotte and perish. They will long be preserued and continue fresh, if after they be gathered they be put into a close vessell with the Lees of white wine, or hanged in a vessell of vinegar, so that they touch not the vinegar.

THRA. What meaneth that great Thistell that springeth there?

MARIVS. Did you neuer reade in your *Columella* of the Hartichoch, specially in his verses that he wrote of Gardning, where he saith: Artichoch.

Go set the brystled Hartichoch,
That well with wine agrees, &c.

Atheneus in his second booke *Dipnosophus* out of *Sophoclus*.

Κύνηγε ἀγκάνδα πάντα πλοῦτε λαΐαν.

A Thistell is the Hartichoch, that euerie where doeth grow. It is a kind of Thistell, by the diligence of the Gardner, brought to be a good Garden hearbe, and in great estimation at noble mens tables: it is as you see framed with a round prickly head, hauing a great sort of Flakes set in order steeple wise. The Greekes call it στόλμον and κίναρον, the Latines *Strobilum*, because the fruite of it something resembleth the Pineable. The Frenchmen call it *Alticocalum*, of the *Arabick* article *Al*, and *Cocalos* a Pineable, whereof it is corruptly called *Artichault*, in

in Italian and Spanish *Cardo*, in Dutch, sometime by the French name, sometime *Strobrin*. It is called of *Columella Cinara*, because in his growing, he chiefely delighteth in ashes. The seed is best sowen in March, and the settes in November: if you will haue it yelde fruite in the Spring, you must bestowe much ashes vpon it, it will hardly beare the first yeere that it is sowen. Beware that you set not the seede with the wrong end vpward, for so shall your Artichoch prowe very litle and euill fauoured. It loueth good ground and well dounged, and prospereth best in fat grounde. *Palladius* would haue you moreouer, to set the seedes in well ordered beddes, in the encrease of the Mone, halfe a foote a sunder, and not deepe, but taking them in three of your fingers, thrust them downe, til the earth come to the first iointes of your fingers, then couer them tenderly, and water them often, specially toward Sommer, so shall you haue the bigger fruite. When they grow vp, they must be continually weeded and dounged, as I saide with ashes. They say, they will lose their prickles, if the tops of the seede be made blunt vpon a stone before they be set: and sweete they will be, if the seede be laid in Pilke. You must keepe them from Mowles and Mise, with Cats or tame Weesels, as *Ruellius* teacheth you. *Athenaus* calleth the stalke of the Artichoch, κλῶνον, that lieth vpon the ground, and that which standeth vpright πτόρυγα.

THRA. Well, what herbe is yonder same that commeth vp as it were heares, with a blewish flowre and pale, hauing in the middest of the belles, as it were, fierie yellow tongues?

Saffron. *MARIVS.* It is Saffron, in Greeke κρόκος, in Latine *Crocus*, in Italian and French so, in Spanish *Aczafran*.

THRA. What neede we care any more for either *Coricum*, *Sicil*, or *Cyren*, from whence we fetch it with so great charges?

MARIVS. Yea, there groweth great plentie of it in Germanie about *Spirs*, and diuers other places, which may compare in goodnesse with any other place. It is set in March of the head that it hath round, and in cloues as the Lillie, the Leeke, and the Sea Onyon. *Constantine* affirmeth, that it may be sette of the rote, as soone as the flower is of. The rotes of

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the heades do so encrease vnder the ground, that of one of them some yære springeth eight or nine others. In many places they are remoued euerie seauenth or eight yære into better ground, wherby they come againe to be as good, as at the first. In the countries lying about the Rhine, they plucke them vp euerie thirde yære, and lay them a drying in the sunne till August, and then pulling off the outer skin, they set them again halfe a foote one from the other: the best heades are those that are fattest, and haue little heares, the worst looke rottenly and ill fauouredly, and haue an ill sauour: It delighteth to growe by high waies and nære springes, and to be trode and trampled on, prospering as it were by oppression: it groweth grœne all the Winter, it is gathered in *Autumne*, when it is come to his colour, by plucking out the little yellowe tongs from the bell, which are afterwardes dryed thrée or foure daies together, and well picked and pourged, and so made vp in Boxes: some thinke it best to drye it in the shadowe. It is craftily counterfeited by the Apothecaries, braying it in sodde wine, which they besmeare adding thereto the scum of siluer or lead to encrease the weight, the craft is perceiued by the dustinesse thereof, and by the sauor of the sodde Wine. The prose of the good is, if it crackle betwéene the handes as a brittle thing, which the counterfeit doth not, or if in putting it to your mouth, it cause your eyes to water. Wherefore, the best is that which is newe, and hath a pleasant smell, in colour like to Golde, and dieth the fingers in touching it. In March you must pourge the grounde where it groweth, and whether ye plucke it vp or not, notwithstanding, other hearbes may very well growe there vntill August: Pursleine, Parsley, or such like hearbes doe best growe there. And when the Saffron beginneth to flowre, you must ridde away the other hearbes: for in Haruest time about September or October it flowreth.

THRA. Here is great store of Rosemarie, the cheefest beautie of Gardens, and not to be wanted in the kitchin. Rosemary.

MARIVS. Of the ordering of Rosemarie, sith you will haue me, I will speake a little. There are which suppose it to be the same which the Grœkes call λιβανωτὸν, because it sauoureth

reth like Frankencenſe, in Latine it is called *Roſmarinus*, and in all other tongues it kéepeth the name, it ſerueth both for pleaſure and profite. *Theophraſtus* maketh two kinds of it, a barrayne, and a fruitefull, and is ſet of ſmall ſlippes in Aprill: it is ſette by women for their pleaſure, to growe in ſundry proportions, as in the faſhion of a Cart, a Peacock, or ſuch like thing as they fanſie. It delighteth in ſtonie or rough ground, and in the toppes is the ſéede incloaſed in little huſkes whit and round. It flowreth twiſe a yéere, in the ſpring, and in the end of ſommer: it is geathered from May till September, and it is good to pluck of the flowre often, that it may not flower too much. In the higher partes of Fraunce it groweth wild in ſuch plentie, that they vſe almoſt no other fewell: it is in colde Countries in Winter ſet in Sellers and hotte houſes, and is brought againe in the Spring into the Garden. But here you muſt beware, that when you firſt bring it out, you kéepe it from the Marche ſunne, ſetting it in the ſhaddowe, acquainting it by little and little with the ayre: ſome vſe to houſe it with Strawe and Horſe doung, and ſo leaue it in the Garden.

Sauge. Sauge, in Gréeke σφακος, in Latine *Saluia*, and like in other languages, is an hearbe common in euerie Garden: it is planted both of the ſéede and the ſlippe in March, in any kind of ground, it maketh no matter where: the Gardners vſe to lay bucking aſhes about it, whereby it proſpereth the better.

Mintes. Next to Sauge is Mint, in Gréeke μίνθος, in Latine *Menta*, in Dutch *Mynt*, in Italian and French, after the Latine, in Spaniſhe *Yerua buena*: it is planted and ordered in all thing as Sauge is, it proſpereth both in drie, and wette grounds, and groweth well by waters. If you lack ſéedes, you may take the ſéede of the wilde Minte, and ſet them with the toppes downeward, whereby they ſhall leaue their rankneſſe, and being once ſowen or ſette, groweth euerie yéere.

Pimpernel. Pimpernell, in Gréeke, πίμπ, in Latine *Pimpinella*, is vſed both in the Kitchin, and in Phiſicke, and being once ſowen, groweth euery yéere both in ſunnie places, and in ſhaddowy: it groweth in moſt places wilde.

Hyſop. Hyſope, in Gréeke ὕσσωπος, in Latine *Hyſſopus*, and ſo called in moſt tongues in Europe, a common hearbe knowen to euerie Gardner: it deſi-

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reth, though no Sunnie grounde, yet good and rich ground, it is planted both of the sæde and of the slippe: when it hath once taken rote, it careth not for the sharpnesse of Winter. Sauorie in Greeke θύμβρα, in Latine *Satureia*, or as *Columella* saith, *Cunila*, in Italian *Coniella*, *Sauoreggia*, *Thymbre*, in Frenche *Sauoreie*, in Dutche *Kuuelzwibel hisop*, groweth in barraine places, and is set and sowed as the plants before. The next is that which commonly is called Basyll, in Greeke ὤκυμον, in Latine *Ocymum*, in French, Italian, and Duche, *Basilica*: an Herbe that is vsed to be set in the middest of knottes, and in windowes, for the excellent sauour that it hath: it is also good for the potte: it is sowed in March and Aprill, and delighteth in Sunny ground, you must put two sædes still together. Basyll is best watred at none, whereas all other Herbes are to be watered in the morning and in the euening, it may be remoued in May. *Theophrastus* saith, that it prospereth best, when it is sowed with curses. Marierum, in Latine *Amaracus*, and *Maiorana*, is also in like sort vsed, the Dutch and the Italians call it after the Latine, the Spaniardes, *Amoredux*, the French *Mariolaiene* and *Thyn*, in Greeke of *Dioscorides* and *Paulus Ægineta* σύμφυτον, this also for the pleasaunt sauour it hath, is set in pottes and in Gardens: it is sowed in March three or foure sædes together, and halfe a foot a sunder, in May when it groweth to some height as Basyll, it is remoued. Time neere of kindred to these, in Greeke θύμος, in Frenche Italian, and Dutch, like the Latine, in Spanish *Tomillo*, delighteth in stonie, light, and Sunny ground: it springeth both of the sæde and of the slippe, and also of the flowre as *Theophrastus* saith. These three tender and delicate Herbes, are to be sowed with great heede, either in earthen pottes, or in Garden beddes. Hitherto haue I described vnto you, such herbes as serue for the kitchin, and because the latter sorts are also esteemed for the sauours, I will go forward with the description of the rest that are set in Gardens for the pleasure of them, and for the sauour, doe garnishe the saide Gardens, and serue also for other purposes. Of Rosemarie, I spake before, I will nowe proceede with these that grow before my sæte. Lauender, cal-

Sauorie.

Basyll.

Marierum.

Tyme.

Lauender. led in Latine *Lauanda*, or *Lauendula*, that groweth in borders about the beddes, in Greeke πολυανθεμον, and keepeth the Latine name in other tongs, doth growe in wilde places and stonie: it is set of the slips, and remoued: it groweth to Spike in June, and in Julie is gathered and tied in bundels for the sauour, the flower is distilled for sweet waters. Flowergentle, in Latine *Amaranthus*, in Greeke ἀμάραντος, though it haue no sauour at all, yet hath it a delightfull beautye to the eie, the Frenchmen for the faireneſſe of the colours, excelling both crimson and purple in graine, doe call it *Passeuelleurs*, the Italians *Fioruelluto*, because it contendeth in colour with crimson in graine, it loueth to be often gathered and plucked, whereby it springeth the better, the flowers after they be dead, with a little water come againe to their colour: it is called *Amaranthus*, because it dieth not.

Flowergentle.

Lauender cotten. *THRA.* Here foloweth Lauender cotten.

MARIVS. This Lauendercotten, in Greeke is called as *Plinie* supposeth χαμαιπυπάρισσον, as it were the little Cypres, some call it *Santonia*, and female Sothernewood, in Dutch it is called *Cypreſſen*, in French *Cyprez*, it groweth commonly in Gardens, springing euery yeere. Myrtell, in Greeke μυρσίνη, in Latine *Myrtus*, in Italian *Myrto*, in Spanish *Araihan*, in French *Meurte*, in Dutch *Welſcheheidelberr*, the leaues are not much vnlike to the leaues of the Oliue tree, somthing smaller, with slender branches, and leaues growing in order one by another as you see, with blacke berries, and leaued like the Pomegranate. It groweth alwaies greene, it is set and sowed both of the seede and slippe, and the stocke: but you must still raise vp the earth about it, till it be throughly rooted. Some sowe the berries being a little beaten, and couered in Furrows of earth: it delighteth in continuall weeding, so groweth it to a handsome height, meete to shadowe hearbes: it loueth to be watred with the vryne of men, or of sheepe. This onely is to be wondred at, that of the liquor thereof alone, may be made all sortes of Wine & Oyle. *Cato* teacheth to make wine of the berries, being dried, and put in water and honny sodden together: if they be not dried, they come to Oyle, howe the Wine of them

Myrtell.

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mœued, it ſpringeth verie ſone and well, being ſette of ſets foure fingers long and more, after the ſetting of the ſeuen ſtars and after remœued in a Weſterly winde, and ſette aſote a ſunder, and often digged. The olde Roſyars muſt haue the Earth loſed about them in Februarie, and the dead twigges cutte of, and where they ware thinne, they muſt be repayred with the young ſpringes. To haue Roſes of fiue ſundry colours vppon one rœte, make when they begin to burgen, a fine hole beneath in the ſtocke vnder the ioynt, and fill it with redde colour made of Braſell ſodd in water, and thruſt it in with a clouth, and in the like ſort put into an other parte of the ſtocke grœne colour, and in an other yellowe, and what other colours you will, and couer the holes well with Dre doung and Lome, or very good earth. If you will haue your Roſes beare betimes, make a little trenche two hand breadthes of rounde about it, and powre in hotte water twiſe a day, and thus doing (as *Democritus* promiſeth) you ſhall haue Roſes in Januarie. You may preſerue Roſes before they open, if making a ſlitte in a Rœde, you encloſe the bloſſome, and when you would haue freſh Roſes, take them out of the Rœdes: others put them in Earthen Pottes cloſe couered, and ſet them abroade: the Roſes continue alwaies freſhe that are dipt in the Dregges of Dyle. If you will haue them at all tymes, you muſt ſet them euery moneth, and doung them, and ſo (as *Didymus* ſaith) you ſhall haue them continually. To cauſe them, or any other flowres to growe double, put two or thrœ of the ſœdes in a Wheate ſtrawe, and ſo lay them in the ground. If you ſette Garlicke by your Roſes, they wilbe the ſwœter: the dryer the ground is where they growe, the ſwœter they will be, as it appeareth by the ſeaſon of the yœre, for ſome yœres they are ſwœter then others: the Roſe will be white, that is ſmokte in with Brimſtone, when it beginneth to open: amongſt all Roſes, thoſe are moſt to be commended, that they call Carnations and prouincials. The Dyle of Roſes was greatly had in eſtimation euen in *Homer* his time, and at this day the Vineger of Roſes is greatly vſed. Nert vnto the Roſe in worthineſſe, for his ſauour and beautifull whiteneſſe is the Lillie, called in grœke κρίνον and λείριον, in Italian *Giglio*, in Lillies.

Spanish *Tirio*, in French *Fleur de Lis*, in Dutch *Lilien*. The Grækes holde opinion, that it sprange first of *Iunos* Milke sprinckled vpon the grounde. In Februarie we beginne to set Lillyes, or if they grewe before, to lose the earth about them with a Rake, taking good heede that the yong tender shutes about the rote be not hurt, nor the litle head: which taken from the olde rote, we set for newe Lillyes. As the Roses are, so are the Lillyes, the sweeter, the drier the ground is where they grow: Lillyes and Roses being once set, continue both verie long. There are redde Lillyes made so by arte, for they take the stalkes and rotes of the Lillie, and hang them in the smoke till they wither, and when the knots begin to vncouer, they are laide in March in the Lees of redde Wine, till they be coloured, and then set in the grounde with the Lees powred about them, so will they come to be purple. Violet in Græke is Ἰον, in Latine *Viola*, Violet blacke, and Violet purple, Ἰον μέλαν, καὶ ἴον πορφυροῦν, in Italian it is called *Viola porporia*, in Spanishe *Violetta*, in French *Violets de Marts & Careſme*, in Dutch *Fiolen:* these although they growe wilde about euerie Hedge and Wall, yet are they set in Gardens with other flowres. There are sundry sorts of Violets, both of kinde and colour, but the ordering of them is in a maner all one.

Violets.

THRA. I haue nowe heard enough of Kitchin hearbes and flowres, therefore now, I praye you, let me heare you saye something of the thirde sort, that is Phisicke hearbes, for me seemeth I see a great sorte of healing hearbes here in your Garden.

MARIVS. Nature hath appointed remedies in a readinesse for all diseases, but the craft and subtiltie of man for gaine, hath deuised Apothecaries shoppes, in which a mans life is to be solde and bought, where for a little byle, they fetch their medicines from Hierusalem, & out of Turkie, while in the meane time euery poore man hath the right remedies growing in his Garden: for if men woulde make their Gardens their Phisitians, the Phisitians craft would sonne decay. You knowe what your olde frende *Cato* saith, and what a deale of Phisicke he fetcheth out of a poore Colwort.

It is but the opinion of a Gardner.

THRA.

is made, *Dioſcorides* ſufficiently declareth. *Plinie* reporteth, that *Cato* made three ſortes of Pytels, white, blacke, and a third kind that he calleth coniugale: it delighteth to growe by the Sea bankes, as *Seruius* ſaith, it groweth at this day commonly in Italie, along by the Sea coaſtes.

THRA. Oh what ſweete and goodly Gelyflowres are heere? You may truely ſay, that Solomon in all his princely pompe, was neuer able to attaine to this beautie: ſome of them glitter with a perfect crimſon dye, ſome with a deepe purple, and ſome with a paſſing beautifull Carnation: I marueile the old writers knew nothing of theſe in their time. Gely-flowres.

MARIVS. There are ſome that ſuppoſe to be a kinde of Garden betony, whiche the Gardner fetching out of the feeld, and thruſting Cloues into the rootes of them, with diligent planting haue brought to this excellency: others thinke it to be called *Vetonica* of the Spaniards, who firſt found it. Some thinke it to be *Oenanthe*, becauſe it floureth with the Vine: it delighteth in warme ſunnie ground, it is ſowed ſeldome of ſeede, but commonly ſette of the ſlippes, as I ſaid of Roſemarie. The Gardners in the end of Sommer, do take the rootes and ſet them in pannes, pottes, or payles, and when the froſtes come, they carrie them into their Sellers, and in fayre warme dayes bring them abroade againe, and ſuffer them to be nowe or then watred with the raine. It hath beene often ſeene, that in ſuch vaultes or ſellers, they haue floured all the Winter long, through warmeneſſe of the place: ſome ſet bowes about them, and couer them with ſtraw and Horſe doung, to preſerue them againſt the cold: it often happeneth, that one Roote beareth one pere white flowre & redde, and the third ſpeckled or Carnation.

THRA. Loe, yonder are Roſes growing in Borders, and made in a maze: do they growe of the ſeede, or of the ſette?

MARIVS. Roſes, called in Greeke ῥόδον, in Latine *Roſa*, and in all other languages as in Latine, are diuerſlie planted, ſometime of the Rootes, ſometime of the Branches, beyng cutte in ſmall ſettes, and planted a foote a ſunder. Some wreathe them in Garlands, and ſo ſette them to haue them ſmell the pleaſanter. The vſe of ſowing of them is beſt: howbeit, Roſes.

they will very well growe of the seede, though it be long ere they spring, and therfore they set them of settes a foot in length, it neither delighteth in rich or moist ground, but is wel contented to growe amongst rubbish, and vnder walles. The places where they must growe, must be digged deeper then Corne grounde, and not so deepe as the Vineyarde: the Rose is rather a Thorne then a plant, and groweth vpon the very brambles: it commeth first out in a little bud and long sharpe beard, which after they be opened, it discloseth it selfe and spreadeth abroad, with a yellow hearie tuske in the midst. *Plinie* maketh mention of sundry sortes of them: one sorte he calleth *Milesia*, hauing an orient and fierie colour, an other *Alabandica*, with white leaues, and *Spermonia*, the basest sort of all: the Damaske and the white, are vsed for sweete waters: they differ in roughnesse, prickles, colour and smell. There are that haue but only fiue leaues, and others with an hundred leaues, neither good in beautie nor in smell: the roughnesse of the rinde (as *Plinie* saith) is a signe of the sauour. There are some little pale ones called Carnation & Prouincars, these doe wonderfully growe where they once are planted, and haue a most excellent sauour.

Muske-roses.

Roses are vsed to be set in Februarie, which is either done with the seede, or the sette planted in little Furrowes. The seedes (as *Palladius* saith) are not the little yellowe thinges in the middest of the Rose, but the graines that grow within the redde riped Berrie: the ripenesse whereof is deemed by the swarthinesse and the softnesse of the berrie: where they once are planted, they continue long, and after they die, they send out newe buddes and springes. If you lacke settes, and woulde of a fewe haue a great number, take the branches that begin as it were to shew their buds, and cutting them in sundrie settes, foure or fiue fingers in length, set them in good grounde well dounged and watred: and when they be of a yéeres groweth, take them vp, and set them a foote a sunder, proine them and trimme them with often digging about them. Roses must still be cut, for the more you cut them, the thicker and the doubler they growe, otherwise they will ware single and wilde, it will also doe them good sometime to burne them: being remoued,

in the Orchard when it is colde, destroieth them. It is written, that if you set Chiches about your Garden, Caterpillers will not breed, and if they be alreadie bredde, you must seeth the iuyce of Wormewoode, and cast among them. The doung of Bullockes burnt vpon the coales, destroieth Gnates, the like also doth brimstone: a Spunge wet with Vineger and hanged vp, draweth also swarmes of Gnates vnto it: also the maw of a Sheepe newe killed, not washed nor made cleane, if it be laide in the place where Mothes, or other such Vermine do vse, and couered a little the vpper part, you shal after two dais, finde all the noysome Vermine crept into it: thus must you do twise or thrise, till you thinke you haue destroied them all. Of killing and driuing away Moles, *Sotion* the Greeke writeth, that you must take a Nut, of any like fruit, and making it hollowe within, fill it vp with Chaffe, Rosen, and Brimstone, afterward stop the vent holes that the Mole hath in euery place, that the smoke breake not out, onely leauing one open, where you shall lay the Nut, in such sort as it may receiue the wind on the backe part, that may driue the smoke into the Mines. There are also trappes to be made, for the destroying of Moles: a frame is to be set vp vpon the newe Hilles, with a peece of wood so hollow and framed, that it may receiue (as it were in a Sheath) an other peece of woode made in fashion like a Knife, to this is ioined an other little sticke that lieth in the hole, and is fastned to a Catche without, that as soone as the Mole toucheth the sticke within, she is taken presently, as it were with a paire of Sheares. Mise are taken, if ye powre into a Platter, the thickest mother of oile, and set in the house a night, as many as come at it, are taken: also the rote of Bearefote mingled with cheese, bread, floure, or grease, killeth them. Tarte and very sharpe Vineger mingled with the iuice of Henbane, and sprinkled vpon the Hearbes, killeth the Fleas, or little blacke wormes that be in them. No kind of vermine will annoy your Hearbes, if you take a good sort of Crefishes, and cast them in an earthen vessell with water, suffering them to worke abrode in the Sunne for the space of ten daies, and after with their licour, sprinkle your Hearbes. But I keepe you long in this

Gnattes.

Moles.

Myse.

Garden Fleae.

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il fauoured Garden, if it please you we will walke into the Orchard adioining.

Of Orchards.

THRA. With a verie good will, although the goodly faire colour and swete sauours of these hearbes and flowres, beside the fayre hedges enclosing it as it were with a gorgeous greene tapestry, make me that I could abide heere euer.

MARIVS. Both the Garden and the Orchard are inclosed with seuerall hedges and ditches, whereby they are defended from hurtfull beasts and vnruly folks (as I told you at the first) when I began to speake of the enclosing of Gardens and Orchards.

THRA. Euery thing liketh me passing well: God Lord what a pleasant ground, what a Paradise is this? me thinkes I see the Orchards of *Alcinous*, the trees are set checker wise, and so catred, as loke which way ye will, they lye leuell: King *Cyrus* himselfe neuer had better. If *Lysander* had euer seene this Orchard, he would haue wondred a great deale more, then he did at *Cyrus* his Orchard.

MARIVS. Such gorgeous Gardens and Orchards as Princes haue, I neither desire, nor meane to counterfeyte: but vsing the diligence of a poore Countrey Gardner, I builde (as they say) my walles according to my wealth. I framed the order, and sette the most part of these trees with mine owne hands, folowing herein, the fathers of the old time, who delighted them selues cheefely with this kind of Philosophie. So then (as I thinke) the Trees and Woodes to be the greatest commoditie giuen to men: for besides the house pleasure that they minister vnto vs, the gracious Lord, that is the giuer of all good things, hath also geuen vs a number of other goodlie commodities by them, which at the first serued men for fode, couering, and clothing: which commodities, the very Ethnicks had in estimation. But vnto vs that knowe God, by whome we haue receiued our preheminence aboue all other creatures, which benefite we ought with thanks to acknowledge, the holie Scripture doth teach a more higher and mysticall consideration: for before that gracious Lorde had framed man, willing to prouide him of fode and apparell, he caused all kinde of

pleasant

THRA. I do remember it, and that he saith he was wont both to helpe himselfe, and his whole familie, with the herbes of his Garden. But what hearbe is yonder with the long stalk, and the long blacke indented leaues on the toppe? If I be not deceiued it is Bearefoote, with whose roote we vse to heale our cattell when they be sicke.

MARIVS. It is so indeede, and is called in Greeke ἑλλέβορος, in Latine *Veratrum*, there are two kindes of it, the blacke and the white: the white, is that which the Dutchmen call *Nyswurts Wranckraut*, the blacke they call *Kristwurts*, because it flowreth about Christmasse, the Italians, the Spaniards, and the Frenchmen keepe the Greeke name. The roote of this Bearefoote they thrust through the eare, or into the breast of the beast, that is either diseased in his lunges, or hath the Murren. *Columella* seemeth to call it *Consiligo*, it groweth not in Gardens, except it be sowed: it continueth long, & loueth cold and woddy ground. There standes, not far from that, an other verie noble hearbe in Phisicke called *Angelica*, it is supposed to be called in Greeke ἄγγελος, and whether it be *Myrrhis* with the Latines or no, I leaue that to the Phisitians to discusse: it is called with the Italians, Spaniards, Frenchmen, and Germanes *Angelica*. His roote, because it is a soueraigne remedie against the plague, and hath diuers other good operations, it is cherished in our Gardens, and being once sowed, it commeth vp euery yeere, it groweth also wilde in the mountaine countreys, and flowreth in July and August. Here is also Helicampana, in Greeke ἑλένιον, in Latine *Enula*, in Italian *Enela*, in Spanish *Enula campana*, in French *Aulne*, in Dutch *Alant*, this also is set in our Gardens for medicines sake, and we make much of it for the roote, it groweth wilde in the hilly countries, and drye shaddowy places. In Sommer the roote is taken out of the ground, and cut in small peeces, is dried: at this daye it is called *Enula campana*, it hath a yellowe flowre, a leafe lyke Mullin, but white and hoarie at the one side. Wormewoode, though it growe in euery place, yet this that you see here is Romane or Pontike. Wormewoode, the Latines call it *Cerephium*, or *Absinthium Romanum*, the Dutchmen *Romische wermut*,

Berfoote or Setterwort.

Angelica

Helecõpanie.

Wormewood.

mut, the Italians *Assenso*, the Spaniards *Encensos*, the Frenchmen *Aluine* and *Absince*, this kinde is sette in our Gardens, and thought to be the best. Sauine which we haue here also in our Gardens, for diuers diseases of cattle, is called in Greeke Sauine. Βρύον, in Latine *Sabina*, in Dutch *Seuenboum*, in Italian as in Latine, in Spanish likewise, in Frenche *Sauinier*, it hath leaues like Iuniper or Cypres, alwaies greene, there are two kindes of it, one like the *Tamariske*, the other like Cypres: it is a bushe rather spreading in breadth, than growing in height: the berries which he beareth, may be geathered in the end of Sommer, or any other time.

THRA. But many times we see Gardens to be destroyed with wormes and vermine, what remedie haue you for this?

MARIVS. Of the faultes of the grounde, and the remedie thereof, as the amending of either too much moisture or dryneese, I spake in the beginning, touching Wormes, Flyes, and other vermine that annoy the Gardens, which for the most part are these, Caterpillers, Snailes, Holes, Mise, Gnats, and Antes. There are that saie, that if you mingle with your seedes Swte, or the iuice of Houseleeke, or Singreene, the Caterpillers will not meddle with the hearb that springeth of such seede, and that they will doe no harme to your Trees, if you sprinkle them with the water wherein the ashes of Vines hath beene laide: moreouer the stalks of Garlicke made in bundels, and burnt in Orchardes or Gardens, destroieth the Caterpillers. Against Caterpillers. They will not breede (as they say) if you burne about the Rootes of your hearbes or trees, quicke Brimstone and Lyme: the same they report of Lie made of the Figge tree. Antes will not annoy your Corne or Hearbes, if you encompasse it round with chalke, or put into their hils, the ashes of burnt Snailes, and if some of them be taken and burnt, the rest will not come neare the sauour: if *Assa fœtida* be laid in Dyle, and powred vpon their hilles, it vtterlie destroyeth them: they wil not touch the trees nor the hearbes, if you annoynt the stalkes with bitter Lupines, or lime laid with Dyle. You must shake of the Caterpillers in the morning, or late in the euening when they be numbed: also water wherein Dill hath been sodden, cast about

in

pleasant trées bearing fruite to Spring out of the earth, that they might serue for the sustenaunce of man: and in the midst lye planted the Trée of lyfe, and thereby, the Trée of knowledge of good and euill, to the end that *Adam* might haue an assured signe of his dutie and reuerence towards God, out of which the Lorde (as in a Temple did speake vnto *Adam*) and *Adam* himselfe, if he had continued in his innocencie after his refection of the Trée of life, had with his posteritie preached GOD, and alwaies béene thankfull vnto him, for his authoritie giuen vnto him ouer al other creatures, as the Prophetical Psalmist singeth. This that thorowe the bountifull liberalitie of God was giuen vs to so good an ende, the vngodly and wicked posteritie turned to idolatrie, consecrating both Trées and Groues, to the idols of the Heathen.

THRA. What? me thinkes you begin to play the Preacher with me.

MARIVS. Surely, there is no better a place to preach in then here, to acknowledge the Creator in his creatures, and by these visible workes, to beholde the Almightie and euerlasting power, blessednesse, bountifulnesse, and Godhead, of the incomprehensible workman, and alwaies to speake and preach of them: but I will say more hereafter. The planting of Trées doth out of all doubt (as I saide) bring vnto vs both profite and pleasures: and therefore this part of husbandry, must not be neglected, for *Columella* accounts it one of the chiefest points of husbandry, which the Poet séemes to agrée vnto.

Of tyllage all this while, and of the starres
We here haue talked.
And Bacchus now of thee I meane to sing, &c.

THRA. I praye you then declare vnto me, the order of planting and preseruing of Trées.

MARIVS. Let vs first sit downe vnder the shadowe of this faire Vine, that yéeldeth both pleasant Wine, and comfortable shadow.

THRA. Agréed.

MARIVS. The sorts of Trées are diuers and manifold: some growe wilde, some come of the séede, some of the rote, as the

the selfe same Poet saith.

Some sorts there are, that of the seede are sowne.
And some that set of rootes, to seedes are growne.

Some doe growe and spring of themselues: a number of others againe are to be sowne. Those that growe wilde without the labour of man, doe beare their seedes each one according to his kinde: but those that are set and drest, doe yelde greater encrease. There are diuers againe that are alwaies greene, and doe neuer lose their leafe, which are (as *Constantine* reporteth) these, the Date, the Orenge, the Lemon, the Cytron, the Bay, the Oliue, the Cypresse, the Pine, the Hollie, the Box, Myrtill, Ceder, and Iuniper. As for strange Trées, and those that will growe no where but at home, we will not meddle withall: we will therefore begin first with those that yelde vs sustenance, and beare fruit, and those are diuided into three sortes: for either of the settes they come to be Trées as the Oliue is, or else shrubbes as the wilde Date, or neither Trée nor shrubbe as the Vine.

THRA. I desire to heare your opinion of euery sort, for I thinke it no small skill to plant such faire Gardens, Orchards, and Vineyards. Me thinkes you haue vsed a wondefull good order, that amongst your Vines, you haue entermedled Oliue trées, Figge Trées, Almondes, and Abrecocts, and that you haue seuered your Orchard from your Garden, and your Vineyard from them both, with faire hedges and ditches.

MARIVS. It was needefull so to doe, least my folkes labouring in some of them should come into the rest, contrarie to my pleasure. First if you will, I will speake of those that bring vs fruite, and then of the wilde, and the order of setting and planting of Woodes. First (as our *Columella* saith) that ground that seruety for an Orchard, will serue for a Vineyard, as you see it doth here: and if the ground be hilly, rugged, and vneuen, it is more meete for a Vineyard then for an Orcharde.

Howe to make an Orchard.

If therefore you will make an Orcharde, you must chose such a ground as is meete for it: a rich grounde, leuell, and lying vpon the Sunne, which when you haue founde, you must well enclose it, as I taught you before in the enclosure of Gardens,

that

that it may lie out of daunger of Cattell and knaues: for although that the trampling, and dounging of Cattell, is not vnprofitable to the Trées, yet if they be either bruſed, or broken whiles they be yong, they will ſoon come to nought. When you meane to dreſſe your Orchard place thus fenced, you ſhal make your furrowes a yeere before you plant them, ſo ſhall they be well ſeaſoned with the Sunne and the raine: and what ſoeuer you plante, ſhall the ſoner take. But if you will nedes plante the ſame yeere, that you make your furrowes, let the furrowes be made at leaſt two moneths before: after fill them full of ſtrawe, and ſet it on fire. The broader and wider that you make your furrowes, the fairer and more fruitefull will your trées be, and the fruite the better. Your furrowe muſt be made like an ouen, or furnace, wider at the bottome than aboue, that the rote may ſpread the better, and the cold in winter, and the heate in Sommer, may the better be kept from it, and alſo in ſteepe groundes, the earth ſhall not ſo eaſely be waſhed away. In ſetting of our fruite trées and Vines, you muſt place them in order, either Checkerwiſe, or Netwiſe: which needfull order of ſetting, is not onely profitable by receiuing the aire, but alſo very beautifull to the eie: when as, which way ſoeuer you loke, you ſhall ſée them ſtande in ranke, and which alſo is to good purpoſe, the Trées ſhall equally receiue their moyſture from the ground.

THRA. I ſée the Gardners in euerie place obſerue this order, ſetting their Trées in ſuch proportion, as which way ſoeuer you loke, your eye ſhall not be let, but ſhall ſée the Trées ſtand ſtreight in order.

MARIVS. I haue vſed two ſortes of this catred order, one wherein my Trées ſtand foure ſquare like the Chequer or Cheſſebord: the other not in ſquare as the firſt, but loſingwiſe or Diamonde wiſe like the glaſſe windowes or Nettes. You muſt frame it according to the nature of the trées, leſt the lower ſort be drowned of the higher. You muſt alſo ſet them a good diſtannce aſunder, that their branches may ſpread at pleaſure, for if you ſet them to thicke, you ſhall be able to ſowe nothing betwixt them, and they wil be the leſſe fruitfull. Therefore Pa-

ladius

Iadius would haue the space betwirt them, thirtie foote at the least: there is more profite in the generall disposing of them, entermedling the greater with the lesser, so as the greate ones do not annoy their vnderlings, either with their shaddowe or dropping, for that they growe not equall to them in strength or bignesse. Pomegranates and Myrtles must be sowed nærer togeather, as nine foote a sunder, Apples nærer than they, and Peares nærer than them both, but of them there are sondrie sortes, Almonds and Figge trees, must also be set nærer. And because there is a naturall friendship and loue betwirt certaine trees, you must set them the nærer together, as the Vine and the Oliue, the Pomegranate and the Myrtell. On the other side, you must set farre a sunder, such as haue mutuall hatred among them, as the Vine with the Filbert & the Bay. There are some of them, that desire to stand two and two togeather as the Chestnut: the droppings also do great hurt of all sortes, but specially the droppings of Okes, Pinetrees, and Mastholmes. Moreouer, the shaddowes of diuers of them are hurtfull, as of the Walnut tree, whose shadow is vnholsome for men, and Pine tree that killeth young sprinkes: yet they both resist the winde, and therefore are best to be set in the outer sides of the Orchards, as hereafter shall be saide. Of the place and the order, perhaps you thinke I haue said ynough: and loke that I should procede to the order of planting and setting.

Dropping of trees.

Friendship amongst trees.

Shaddows of trees.

THRA. What time is the best for planting and setting of trees.

Time of planting.

MARIVS. The chefest time of planting (as *Florentine* sayth) is the end of Sommer, for then is nature most occupied about the roote, as in the spring about the vpper partes: and therefore grafting is meetest in the Spring, and setting in the ende of Sommer: for the plants are watered all the Winter, and therefore it is best setting or planting, from the setting of the seauen starres, vntill the twelft of December. In the spring tyme, you may sette those thinges that you forgatte before, at what season soeuer it be: loke that you set them in the afternoone, in a faire westerly winde, and in the wane of the Moone.

Time for grafting.

Plinie

Plinie saith, that this note is of greate importance for the encrease of the Tree, and goodnesse of the fruit: If the Tree be Planted in the encrease of the Moone, it groweth to be verie greate: but if it be in the waine, it will be smaller, yet a great deale more lasting. The obseruation of the Moone

THRA. But are there more waies then one of Planting and setting.

MARIVS. A great sorte: we plant either by Grafting, setting of the kernell, or the stone, setting the rootes, stockes, or slippes, grafting betwixte the barke and the Tree: some are planted in some of these sortes, others in all. In Babilon (as they say) onely the leafe sette, comes to be a Tree, first I will speake of Grafting, and then of the rest. There are that appoint but three kindes of Grafting, betwixte the barke and the woode, in the stocke, and emplastring, or inoculation. The first sort they cal Grafting, the seconde imbranching, the thirde inoculation, or imbudding. Such Trees as haue thickest barkes, and drawe most Sappe from the grounde, are best Grafted betwixte the barke and the wood, as the Figge, the Cherie, and the Oliue: those that haue thinne rindes, and content themselues with lesse moisture, as if the Sappe leauing the barke, should gather it selfe to the hart, as the Orenge Tree, the Apple Tree, the Vine and diuers others, in these it is best to open the stocke, and Graffe in the woode. Some Trees are also best Grafted vpon other some, the Figge that prospereth best vpon the Mulbery stocke, and the Plane Tree: the Mulbery vpon the Chestnut, and the Beeche, the Apple, the Peare, the Elme and the white Poplar, wherein if you Graffe, you shall haue your Mulberies white: vpon the same stocke are Grafted the Peare, the Quince, the Medler, and the Seruisse: the Peare vpon the Pomgranate, the Apple, the Quince, the Mulberie, and the Almon. If you Graffe your Peare vpon a Mulberie, you shal haue redd Peares: the Apple is Grafted vpon all Peare stockes, and Crabbe settes, Willow, and Poplar: being Grafted vppon the Quince, it bringeth forth the frute which the Grekes call *Melimela*: it is also Grafted vpon the Plomtree, but being Grafted vppon the Plane Tree, it bringeth forth redde Apples. The kinds of planting and graffing of Trees. Three kinds of Graffing. What trees are best to be grafted betwixt the barke and the woode. What trees agree best together. To haue red Peares & Apples.

The Medlar being Grafted vpon the Thorne, the Graffe groweth to greate bigneſſe, but the ſtocke continewes ſmall: vpon the Pine Tree, it bringeth a ſweete fruite, but not laſting. The Peach Grafted in the Thorne, or the beeche, groweth to be verie faire, and greate: the Almond and the Peach being ioyned together, and Grafted in the Plomtree, will beare a Peach with an Almonde in the ſtone. The Filbert will onely be grafted in the Wilding, not agreeing with any other. The Pomegranate delighteth in diuers ſtockes, as in the Willowe, the Bay, the Aſhe, the Damſon, the Plome, and the Almond, vpon all which he proſpereth well. The Damſon groweth very well vppon any kind of wild Peare, Quince, and Apple: The Cheſtnut liketh well the Walnut and the Beech. The Cherie refuſeth not the companie of the Peach, nor the Turpentine, nor they his: the Quince will well be grafted vpon the Barberie: the Mirtle vpon the Sallowe: The Plom vpon the Damſon: the Almonde vpon the Filbert: the Citron, becauſe of his tender Tree, and thinne rinde, will ſcarſely beare any other graffe and therefore contentes him ſelfe with his owne branche. The Vine that is grafted vpon the Cherie Tree (as *Florentinus* promiſeth) will beare Grapes, and Grafted vpon the Oliue, will bring forth a fruit, that bearing the name of both his parentes, is called *Eleoſtaphilos*. In fine, all young Trees that haue ſappe in the barke may be Grafted: if it be greater, it is beſt Grafſing nere the Roote, where both the barke and the Wood, by the reaſon of the nereneſſe of the grounde are full of Sap. He then that will graft either in the ſtocke, or betwirt the ſtocke & the rinde, let him gather his graffes from a fruitful tender tree, and full of ioints, and out of the new ſpring, except he mean to Graffe an olde tree, when as the ſturdier the graffes be, the better they are, otherwiſe the laſt ſhootes of ſuch trees as haue lately borne will be the beſt. You muſt gather them on that ſide the tree that lieth vpon the North, others like better the Eaſt ſide, then the ſhaddowie. *Virgill* forbiddeth thoſe that growe vppon the top, thinking them better that growes out of the ſide. To be ſhorte, your Graffes muſt be full of buddes lately growne out, ſmoth, the rinde ſmoth, good, and readie to growe: they muſt

A Peache with an Almonde in it.

Olyue grape.

The choiſe of graffing.

must be of the last yéeres growth, which is knowne by the knottes or ioyntes, that declare euery yéeres growth: Beside, Graffes of all Trées are not to be gathered alike: for Vines and Figge Trées are driest in the middle partes, and take best of the top, and therfore from thence you must gather your graffes: Olives are fullest of Sappe in the middest, and the outer parts dryest. Those best agrée together, whose rindes are néerest of Nature, and doe blossome, and beare both about a tyme. You must gather your Graffes in the wane of the Moone, tenne daies before you Graffe them. *Constantine* addeth this reason, that it is néede the Graffe doe a little wither, that he may the better be receiued of the stocke. You must appoint your Graffing time in the Spring, from March, when as the buddes doe beginne to burgen, but not come out (although you may Graffe the Peare when his leaues be out) vntil May: for graffing in raine is profitable, but not for imbraunching. The Olive, whose springes doe longest budde, and haue much Sappe vnder the barke, the aboundance wherof doth hurt the Graffe, must be Grafted (as *Florentine* saieth) from May, till June. *Columella* woulde haue the Olive Grafted from the twelfth of March, till the first, or sixth of Aprill, and the time of Graffing to bée the Moone encreasing, in the afternoone, when there bloweth no South wind. When you haue found a good graffe, take your knife (being very sharpe) and pare it about a thrée fingers from the ioint downward, so much as shall be méete to bée sette in the stocke: that part that is vnder the ioynt (not perishing the pith) you must cut with your knife, as if you should make a pen, so as the woode with the woode, and the barke with the barke, may ioine togither, as iust as may be. Which being done, if you meane to graffe the stocke, you must first salve it smoth, and then cleaue it in the middest with a sharpe knife, about thrée fingers: and to the ende you may handsomely put in your Graffe, you must haue a little wedge of woode or Iron, (*Plinie* thinkes it better of bone) which wedge (when you wil Graffe betwéene the rinde and the stocke) must be made flatte on the one side, and rounde on the other, and the Graffe must be pared also flat on that side that must stande next the woode, taking

The knots.

The time for graffing.

The manner of graffing.

king alwaies good hēde, that the pith be not periſhed: The other part muſt onely haue the rinde pulled of, which after you muſt ſette in the cleſte, or betwixt the barke, til you ſee all parts agree together. Some doe cut the point of their Graffe three ſquare, ſo as two ſides are bare, and the other couered with his barke: and in that ſorte they vſe to Graffe in a ſtocke one againſt another, but it is thought beſt to Graffe no more but one. When you haue thus ſet in your Graffe in the ſtock, pluck out the wedge: but here is a great carefulneſſe, and hēde to be vſed. And therefore good Grafters, thinke it beſt to holde the Graffe euen with both hands, leaſt in the binding and pulling out of the wedge, the Graffe be hurt, or ſtande vneuen. For auoiding of which, ſome vſe for to binde the ſtocke about, and after to put in the wedge, the bands kēping it from opening to wide. The harder they be ſet in, the longer will they be ere they beare, but will indure the better: you muſt take hēd therefore, that the cleft be not to ſlacke nor to ſtrait. When you haue thus Graffed, binde the ſtocke with a twig, and couer it with loame, well tempered with chaffe, two fingers thicknes, and (putting moſſe round about it) tie it vp ſo, that there come no raine at it, nor be hurt with the Sunne or the Winde. This is the order both in the olde time, and at this daie vſed: though in *Columellus* time (as it appeareth) they were not wont to Graffe, but onely betwirte the barke and the Wode, for the olde people (as *Plinie* writeth) durſt not as yet meddle with cleauing of the ſtocke: At length they preſumed to make holes, and Graffe in the pithe, and ſo at laſte waxed bold to cleaue the ſtocke. *Cato* would haue the ſtocke couered with claie and chalke, mingled with ſande, and Oxe doung, and ſo made in morter. Sometime they Graffe with the toppe of the Graft downewarde, and they doe it to make a little Tree ſpreade in breadth. It is beſt Grafting nere the grounde, if the knottes and the ſtocke will ſuffer: and *Plinie* would haue the Graffe grow forth not aboue fiue fingers. If you will graffe a little Tree, cut it neere the grounde, ſo as it be a foote and a halfe hie. If you would carrie your Graftes farre, they will longeſt keepe their ſappe, if they be thruſt into the rote of a Rape: and that they will be preſer-

To keepe your grafs.

ued,

ued if they lie betwixte two little guttes, runninng out of some Riuer, or Fishe ponde, and be well couered with earth.

THRA. I do nowe greatly desire to heare you saie some thing of emplastering, or inoculation, that is, in Graffing with the budde or the leafe, which you call in Greeke Εμφυλλισμὸν which kinde of Graffing, I see those that are giuen to newe fashions delight much in. Of implastering & inoculation.

MARIVS. This is no newe maner of Graffing, but we find that it was vsed both of the Latines, and of the Greekes, when taking of a leafe or little budde, with some parte of the rind with him, we Graffe it into an other branch, from which we haue taken as much barke. This order (*Columella* saith) the husbandes in his daies were wonte to call emplastring, or inoculation: and before *Columellas* daies, *Theophrastus* in his booke De causis Plantarum, doth shewe the reason of inoculation. *Plinie* doth saie, it was first learned of Dawes, hiding of seedes in caues and holes of Trees. This kind of Graffing, as *Columella* doth write, and our Gardners them selues confesse, is best to be vsed in Sommer, about the twelft of June: yet *Didymus* saith, he hath Graffed in this maner, and hath had good encrease with it in the spring time. And sithe it is the daintiest kind of Graffing, it is not to be vsed in all Trees, but onely in such as haue a strong, a moiste, and a sappie rinde, as the Oliue, the Peach, and the Fig, which are full of milke, and haue a bigge barke. Of that tree that you meane to Graffe, chose the youngest and the fairest branches you can, and in them take the budde that is likeliest to growe, and marke it round about two ynches square, so as the budde stand euen in the middeste, and then with a sharpe knife cutte it round about, and flawe of the rinde, taking good heed you hurte not the budde, and take out the peece. Afterwardes, go to the tree that you meane to Graffe on, and chose likewise the fairest branche, and pare awaie the rind a little space, and ioyne in your budde so iust, as the rindes may agree together so close, as neither Water nor Winde may enter in. You must loke that you hurte not the Wood, and that the rindes be of one thickenesse. When you haue this done, binde it vp, so as you hurte not the budde: Then clay it ouer all,

leauing libertie enough for the budde. Cutte of all the spring that growes about it, that there be nothing lefte to drawe awaie the Sappe, but that it may onely serue the Graffe: After one and twentie daies, vnlose it, and take of your couering, and you shall see your budde incorporated in the branche of a strang Tree. *Columella* speaketh of an other sort of Graffing, to bore a hole in a Tree with an Augur, either to the pithe, or the vttermost rinde, going somethyng sloapewise downward, and getting out all the chippes cleane, take a Vine, or a braunche of the best Vine, not cutte from his old mother, and paring awaie the ouer rinde, thrust it fast into the hole being all moiste and full of Sappe, leauing a budd or two onely vpon it: afterwarde, stoppe the hole well with Mosse and Claie, and commit it to the earth. In this sorte may you Graffe Vines vppon Elmes, so shall the branch liue, being both nourished by his olde Mother, and his newe Father. Two yeere after, you shal cutte of the newe graffed branch, and the stocke wherein you Grafted, you shall saw of a little aboue the boring, so shall the Graffe become the cheefe part of the plante. The like do our Countrey men, taking a branch of a Beech a foote thicke: And when they haue cutte it, and bored it, they sett in it the branches of the best Peare or Apple that they can gette, setting the same in a very wette ground in March, and in the same Moneth the yeere after, taking vp the Beech, they cutte it a sonder with a saw, betwirt the holes and the branches: and euery peece of stocke with his branches they sette in very rich and fruitefull ground. There are some that bragge of an other kinde of Graffing, not much vnlike to the former, whereof notwithstanding, *Africanus* in *Constantine* maketh mention, as tried in a Peach. They will a man to take the branch of a Willowe as bigge as your arme, and two Cubites in length, or more: this they would haue you to bore through the middes, and after slipping off the branches of a Peach as he standes, leauing onely the top vntouched, they would haue you to make the Peach passe through the Willowe batte, and that done, to bow the Willowe like a Bowe, setting both his endes into the earth, and so to binde vp the hole with Mosse, Mortel, and bands. The yeere after when as the head of the peach hath

Wimble Graffing.

An other maner of Graffing.

ioyned

ioyned himselfe with the pith of the Willow, that both the bodies are become one. You shall cutte the Tree beneath, and remoue it, and raise vp the earth, so as you couer the Willowe bowe with the toppe of the Peach: and this shal bring you peaches without stones. This kinde of Graffing must be done in moyste places, and the Willowes must be holpen with often waterings, that the nature of the Tree may bee of force. The kindes and maners of propagation, are declared by *Plinie*, who telleth of two kindes: the first, wherein a braunch of the Tree being bowed downe, and buried in a litle furrow, and after two yeres cut off, and the plant in the third yeare remoued: which if you entende to carry any far distaunce of, it is best for you to burie your braunches in baskettes, or earthen vesselles in which you may aptliest carry them. And an other more delicater way he speaketh of, which is to get the Roote out of the verie Tree, laying the braunches in baskettes of earth, and by that meanes, obtaining Rootes betwixte the very fruite and the toppes (for by this meanes the roote is fetched from the verie toppe, so farre they resume) and from thence fetch them, vsing it as before: in which sorte you may also deale with Rosemarie and Sauine. *Columella* likewise teacheth away, how slippes of all manner of Trees may be Graffed in what Trees you list.

Propagation and his kindnes.

THRA. And some are also set of the slips, or slimmes: I my selfe haue plucked a braunch from a Mulberie Tree and bowsing the ende a little, with a mallet, haue set it in the ground and it hath growen to be a faire Tree: The like hath beene tried (as they say) in apples and peares.

MARKS. You saye well, for Nature hath shewed vs, that the youngsciences pluckedfrom the rootes of the trees will growe: the youngest are best to be planted, and so to be pulled vp, as they may bring with them some parte of their mothers bodie. In this sorte you may plant Pomegranates, Filbertes, Apples, Seruilles, Medlars, Plomes, Figges, but specially Vines, and sometimes Cheries, and Pirteiles. Of the stocke and the braunches are also planted the Almonde, the Peare, the Mulberie, the Orenge, the Oline, the Quince, the Iuie, and the Turkish Plome: which the oftner you remoue them the better

they prowe. *Plinie* saieth, the branches cut from the Trée, were at the first onely vsed for Hedges, Elder, Quinces, and Briers medled together, after wardes for vse, as the Poplar, the Alder, and the Willowe, at this daie we set them where we best like. Heede must be taken, that the stockes, or the sets be of a good kind, not croked, knottie, nor forked, nor slenderer, then that a man may well gripe with his hande, nor lesse then a foote in length.

THRA. It remaineth now, that you speake of the setting of the fruite or kernell.

MARIVS. Nature (as *Plinie* saieth) hath taught vs to set the kernell, by the fœdes deuoured of Birdes, and moistened with the warmth of their entrailes, and after voided in the boughes and rises of Trées: whereby we finde many times a Plane Trée growing out of a Baye, a Baye out of a Cherrie, and a Cherrie out of a Willowe. Many Trées are sette of the fruite, kernell, or stone, which growe yerely of themselues, by reason of the falling of the fruit: as Chestnuttes, Haselnuttes, and Walnuttes. *Columella* saith, they are the fruitfuller Trées that spring of their fruite, then those that are set of the stocke, or the branch. Some delight to be set in Trées, and not in the ground: when they haue no soile of theyr owne, they lyue in a stranger. Of the fruit or kernell, are planted Nuttes, Almonds, Pistaces, Chestnuttes, Damsones, Plomes, Pineapples, Dates, Cipresse, Baies, Apples, Peares, Maples, Firtrées, Cheries, Peaches, and Abricotes: But set or planted, they prowe to be the kindlier. Some of these doe growe in Grafting and other waies: for experience teacheth, that the Nut and the Terebinth are Grafted, and *Demagéron* witnesseth as much: neither are all fruites, kernelles, and stones set in like sort, as hereafter shall be séene. Some are laide in water before, others not: some lie three daies in hony and water, and at the fal of the leafe, are buried in the ground till March: and then set Nuts are onely laide in moyste doung a day before, and of some in water and honie onely a night, least the sharpnesse of the hony destroy the sprowte. Some are sette with their toppes standing vpward, as the Chestnut: others downward, as the Almonde, though

The keeping of plants.

though this is not greatly to be regarded, sith wee see the fruite that falles from the Tree, or is let fall by Birdes, doth prosper best of any other.

THRA. I haue a wonderfull delight in the Impe Gardens of these Countries, I pray you tell mee how they bee ordered.

MARIVS. The ordering of an Impe Garden may not bee passed ouer, wherein as in a Parke the yong Plantes are nourished. And because the Nurse sometimes ought to be kinder, and tenderer than the Mother, a meete grounde must bee chosen for the purpose: that is, a grounde drie, fat, and wel laboured with the Mattocke, wherein the straunger may be well cherished, and verie like vnto the soile, into which you meane to remoue them. The kernels, or stones, must not be altogither naked, but a little couered with some part of the fruite, so shall they afterward endure the longer. They must be sette a foote, or therabouts a sunder: After two yeeres they must bee remoued. And because their Rootes do runne very deepe into the grounde, they must be somewhat bent, or turned in, to the ende they may spreade abroade, and not runne downward. Aboue all things, you must see it be free from stones and rubbish, wel fenced against Poultrie, and not ful of chincks or clefts, that the Sunne burne not the tender rootes: they must be set a foote and a halfe a sunder, that they hurt not one the other with their neere growing. Among other euils, they will be full of Wormes, and therefore must be well raked and weeded: beside, growing ranke, they must be trimmed and proined. *Cato* woulde haue them couered ouer with Lattuses vpon forkes, to let in the sunne, and to keepe out the cold: Thus are the Kernels of Peares, Pineapples, Nuttes, Cypresse, and such others cherished. They must be gently watred for the first three daies, at the going downe of the Sunne, that they equallie receiuing the water, may open the sooner. *Zizipha*. or Turkey Plomes, Nuttes, Walnuttes, and Chestnuttes, Bayes, Cheries, pistaces, apples, dates, peares, maples, firres, plomes, and diuers others, are sette of the stone, or kernelles. In remouing of them, haue speciall regard, that they be set in the like

Of Impe Gardens.

like soile, or in better, not from hot and froward grounds, into cold and backwarde, nor contrarie from these to the other. You must make your Furrowes so long before, if you can, that they bee ouergrowne with good mould. *Mago* would haue them made a yeare before, that they may be well seasoned with the Sunne, and the weather: Or if you cannot so, you must kindle fires in the middest of them two Moneths afore, and not to set them, but after a whyle. The depth of their setting must be in stiffe claie, or hard ground, three Cubites: and for Plome Trees a handfull more. The Furrow must be made Furnase like, straight aboue, and broade in the bottome: and in blacke mould, two Cubites and a hand bread, being square cornered, neuer deeper then two foote and a halfe, nor broader then two foote broade, nor neuer of lesse depth, then a foote and a half: in which in a wet ground will draw neere the water. Such as delight in the deapth of the grounde, are to be set the deeper, as the Ashe, and the Olyue: these and such like, must be set to foure foote deepe, the others it sufficeth if they stande three foot deepe. Some vse to set vnder their Rootes rounde little stones, both to restein, and conueigh away the water: others lay grauell vnderneath them. The greater Trees are to be set towards the North and the West, the smaller toward the South and the East. Some will haue no Tree renowned, vnder two yeere old, or aboue three: and others when they be ten yeeres growth. *Cato* resisteth *Virgiles* authoritie, that it is to great purpose, to marke the standing of the Tree, as it grewe at the first, and to place it towardes the same quarters of the heauen againe. Others obserue the contrary in the Vine, and the Figge tree, being of opinion, that the leaues shall therby be the thicker, and better defende the fruit, and not so sone fall: beside, the Figge Tree will be the better to be limbed vpon. Moreouer, you must beware that by long tarying, the rootes be not withered, nor the winde in the North when ye remoue them, wherby many times they die, the husbande not knowing the cause. *Cato* condemneth vtterly all maner of windes stormes in the remouing of Trees, and therefore it is to great good purpose, to take them vp with the earth about them, and to couer the rootes with a turffe,

turffe, and for this cause *Cato* would haue them to be carried in baskettes filled with earth vp to the toppe: the Tree must so be sette, as it may stand in the middest of the trench, and so great heede must be taken of the rootes, that they may not be broken, nor mangled.

THRA. Lette vs nowe go forwarde with euerie Tree in his order.

MARIVS. Among all Trees and plantes, the Vine by good right chalengeth the Soueraignetie, seeing there is no plant vsed in husbandrie more frutefull, and more commodious then it, not alonely for the beautifulnesse, and goodnesse of the fruite, but also for the easinesse he hath in growing, whereby he refuseth not almost any kinde of Countrey in the whole worlde, except such as are too extremely scorched with the burning heate of the Sunne, or is too extremely frozen with the vehemente colde, prospering also as well in the plaine and champion Countrey, as it doth vpon the hillie and Mountaine Countrey: likewise as well in the slife and fast grounde, as in the softe and mellowe grounde: And often times in the Loamie and leane grounds as in the fatte and liggie, and in the drie, as in the moiste and Spirie, yea, and in many places, in the verie Rockes it groweth most abundantlie and most fruteffullie, as is to be seene and proued at this date about the Riuer of Rhine in Germanie, and the Riuer of Rhosne in France: and aboue all this, it best abideth and beareth the contrary disposition of the heauens. The Vine

THRA. No doubte it is the most excellent Plante: but whom doe you suppose to be the first authour of the planting of it? The common sorte doe attribute first inuention of it to *Bacchus*.

MARIVS. Wee that are taught by Gods holy worde, doe knowe that it was first founde out by the Patriarche *Noah*, immediatly after the drowning of the worlde: It shall be, the Vine was before that time, though the Planting and the vse thereof, was not then knowen. The Heathen both most falsely, and verie fondely, as in many other thinges, doe giue the inuention of the same vnto the God *Bacchus*. The inuention of the Vine.

But

But *Noah* liued manie yeeres before either *Bacchus*, *Saturnus*, or *Vranius* were borne.

THRA. It is most likely so: But I would faine knowe, whether the planting of Vines doth more enriche the Husband, then other Husbandries doe.

MARIVS. About this question there is no little adoo among the writers of olde, where there are some that preferre Grafting, Tilling, and Woodsales farre aboue the Vines: and yet againe there wantes not great and learned men, that affirme the Vine to be most gainefull: as declareth that old fruitfulnesse of the Vines, mentioned by *Cato*, *Varro*, and *Columella*, which vpon euery Acre yelded 700. Gallondes of Wine, and the Vineyardes of *Seneca*, wherin he had yeerely vpon one Acre 1000. Gallondes: when as in Corne ground, Pasture, or Woodland, if a man do gette vpon one Acre xx. s. a yeere, it is thought a great matter.

The vineyard most gainfull.

THRA. But the Vine asketh great charges, and greate trauaile about it, and it is subiecte to many mishappes, as the cold Frostes of Winter, the blastes and burning of Sommer and from the first appearing, till the third of Maie (which is the laste decretorie daie of the Vine) the hurte of the cold and Frost is feared. When it hath scaped this danger, then commeth a greater mischief, which lightly euery yeere doth great harme: for either with blastes in the Dogge daies, or for lacke of raine, the Grapes are withered and spoiled, or els with ouermuch Raine they ware sowre, and not ripe. Sondrie other mishappes there happen, that the Vine is subiecte to.

Corne feeld and vineyards cõpared.

MARIVS. I graunt: so is your Corne likewise, for both it asketh great charges, and such casualties oft times vndoeth the poore Husbande. For in all kinde of Husbandry, if there be not great diligence, and good skill imploied, there will be but smal cõmoditie reaped. And especially the vine requireth great husbandry about it, for it is tender, and soone harmed, and therfore in choise of the Vineyarde, there must bee good heede, and both the nature of the Countrey, and the disposition of the Heauens to bee well considered. Most men plant their Vines without any great care, or heede of them: and when they growe vp,

vse

vse little diligence in the trimmyng of them, by which negligence, many times they wither before they be ripe. Others againe thinke it makes no great matter, what ground they bestowe about it, and most tymes laye out for this purpose, the worste grounde they haue, as though it would serue for this Plant that will serue for no other thing. Some againe reape all the commoditie they can the first yeres, not prouiding for farther time, and so complaine, that their gaines doth neither answere their trauaile, nor their charges, wheras indede their owne follie and negligence is the cause: for if there be diligence and paines bestowed vppon it, as *Columella* prooueth by many reasons, there is no husbandry so profitable, as the planting of Vines.

THRA. I doe not denie but that there is great profite in it, where the ground is meete for Vines, and not so fit for corn: otherwise I thinke of sowing of Corne to be an easier matter, and spedier way to enrich the husband.

MARIVS. Surely as touching the easinesse of the husbandrie, and the greatnesse of the gaine, the olde writers haue euer preferred the Vineyarde afore the Corne fielde: for as *Columella* reporteth *Siserna* writeth, that the labour of one man is sufficient for eight acres of Vines, or at the least for seauen: of the encrease I haue spoken before.

THRA. Marie sir at this day one man thinkes three Acres too much for him: but not to trouble your talke, I praie you goe forward with the husbandry of your Vines.

MARIVS. The ordering of the Wine bearing Vines, as the sorts of Vines are sundry, neither can they be conteined in certaine numbers, for there is as many sortes, as there is of grounde. *Homer* giueth the chiefest praise to the Wine of *Maronia*, and *Pramnium*, *Virgill* most commendeth Rhenishe wine: others the wine of *Aminia*, *Lamentana*, *Candy*, and *Corsega*, but I mean to speak of those that are commonly in our dais. In Italy at this day they make most account of wine of *Corsega*, *Romam*, and *Mesina*. In Spaine the cheefest esteeme wine of S. Martine, of *Ribodari*, and *Giberalter*. In France the greatest praise is giuen to the Wine of *Orleans*, *Anjou*, and *Greues*,

Germanie

Germanie began but of late to meddle with planting of vines, for *Varro* writeth that the Frenchmen, and Germaines had in his time bothe Vines, and Olives: but at this day the *Rhine*, the *Necker*, the *Mene*, *Mosel*, and *Danaw*, may compare with any Countries, for goodnesse of their Vines.

THRA. I see that the Vines are diuersely dressed otherwise in Italie, then in France, and otherwise in France, then in Germanie, euery Countrey vsing his seuerall fashion.

MARIVS. True: for as *Plinie*, after *Columella*, teacheth the Vine may be planted fiue sundry waies: for either his branches are suffered to runne in safetie vpon the ground, or else without any stay growe vpright, or hauing a stay or a prop set for them, they climbe vp by it, or else run vp by a couple of such props, called of *Liuy* a yoke, or else sustained with fower of those yokes, which of the resemblance that they haue with the hollowe gutters of a house, are saide to be guttered: Others againe suffered to runne vppon frames like Arbers, seruing to sit vnder, and are called Arber Vines: Others runne vp by the walles of houses. Moreouer, the yoked Vines, called in Greeke ἐπιζευγίδες, are tyed together, and ioyned with three or fower proppes, as if they were yoked: some doe let them runne vppon Trees, as commonly in *Lumbardy*, they are suffered to climbe vpon Elmes, Willowes, and Ashes, where they greatly prosper: neither do they like all manner of Trees, for they hate the Nut Tree, the Baye, the Radish, and the Coll: as againe they loue the Poplar, the Elme, the Willow, the Figge, and the Oliue Tree. They Vines that are yoked, or staied vp with props, receiue more aire, and beare their fruit the higher, and ripe the better, but aske more trouble in the loking to: and these are so ordered, that they may be plowed, whereby they are the more fruitfull, because they may the oftner, and with the lesse charge be tilled. The Vines that creepe vpon the ground, make much wine, but not (as *Columella* saith) so good.

Trees which be friends or foes to the Vine.

THRA. Now to your ordering of them.

MARIVS. First, I will speake of the ground, and of the digging of it, and after of the planting, and cutting of them. And first you must take for a speciall note, that euery Vine will not

The ordering of Vines.

not agrée with euery place, nor yéelde his Wine in like goodnesse, of such force is the quality of the aire, neither will all kind of ground serue: For *Columella* doth counsaile to sette the Vine in a wilde grounde, rather then where Corne or bushes haue growne: For as for olde Vineardes, it is most certaine, they are the worste places of all other to sette newe in, because the ground is matted, and as it were netted with the remaines of the olde Rootes: Neither hath it lost the poyson of the rotten and olde stinking Rootes, wherewith the soile (glutted as it were with Venime) is benommed. And therefore the wilde and vntilled ground is chéefely to be chosen, which though it be ouer growne with shrubbes and Trées, may yet easilie be ridde. If such wild ground be not to be had, the best is the plaine champion land without Trées: if neither such a ground, then the light and thinne Bushie ground, or Oliue grounde. The laste and worst (as I saied) is the old rotten Vineyard, which if necessitie compell you to take, you must first ridde the ground of all the olde rotten rootes, and then couer it either with olde doung, or with the newest of any other kind of mannering: the Rootes being thus digged vp, must be laied vp together, and burned. After must the grounde be considered, whether it be mellowe and gentle: It is thought to be good, that is something grétie and grauelly, and full of small Pébles, so that it be mingled with fatte mould withall, which if it be not, is vtterly disalowed.

What ground is best for the Vine.

Dame Ceres ioyes in heauie ground, and Bacchus in the light.

You shall perceiue it to be massie and thicke, if being digged, and cast into the hole againe, it riseth ouer: if it scarsely fill the hole, it is a signe that it is light and thinne. The Flint by the generall consent of Husbandmen, is counted a frend to the Vine, speciallie where it is well couered with good mould: for being cold and a kéeper of moisture, it suffereth not the Rootes to be shalded with the heat of Sommer: So much, that *Columella* doth will men to laie certaine stones about the sides of the Vinetrées, so that they exceede not the weight of fiue pounde a péece: which as *Virgill* hath noted, kéepes awaie the water in Winter, and the heate in Sommer.

Hurle

Hurle in the thriftie ſtone, or therein throwe the naſtie ſhelles. So doe wee ſee the bankes of the Rhine being full of theſe ſtones, to yeelde an excellent good wine: but the ſtones that lie aboue ground, are to bee caſte awaie: for in the Sommer being heated with the Sunne, they burne the Vine, and in the Winter they hurt them with their coldneſſe, contrarie to thoſe that lie in the bottome. But the beſt of all is the foote of an hill, which receiueth the falling mould from the toppes: or the valle, that with ouerflowing of Riuers hath beene made ritch. Neither is Chalkie ground to be refuſed, though the Chalke of it ſelfe that Potters vſe, is hurtful to the Vine. The hongry Sandie ground, the ſalte, bitter, and thirſtie ground, is not meete for the Vine: yet the Blacke and Reddiſh Sand, medled with ſome moiſte earth, is of ſome allowed well yenough. Moreouer neither grounde too hotte, or too colde, too drie, nor too moiſte, too ſclender, nor too ſtife, that will not ſuffer the raine to ſincke, as meete is to be vſed for Vines, for it will eaſily gape and open, whereby the Sunne comming in at the craieſſes, doth burne the rootes: That againe which is ouer thinne, letting in as it were by ventes by Raine, the Sunne, and the Wind, doth drie vp the moiſture of the rootes: The thicke and ſtiffe ground is hardly to be labored, the fatte grounde ſubiecte to too much ranckeneſſe, the leane ground to barrenneſſe: wherefore there muſt be an euen temperature amongeſt theſe extreamities, as is required in our bodies, whoſe health is preſerued by the equall medley of heat and cold, drieth and moiſture, fulneſſe and emptineſſe, or thickneſſe and thinnes: Neither yet is this temperature in grounde for Vines ſo iuſtly to be euened, but that there is required a more enclining to the one parte, as that the earth be more hotte then cold, more drie then moiſte, more ſubtill then groſſe, ſpecially if the ſtate of the Heauens agree: againe, what quarter whereof the Vineyarde ought to lie, it is an old controuerſie, ſome like beſt the riſing of the Sunne, ſome the Weſte, ſome the North, *Virgill* miſliketh the Weſte: others againe thinke the beſt liyng to be vpon the South. But in generall it is thought beſte in cold Countries, to haue it lie toward the South, in warme countries vpon the Eaſt, in hotte

What quarter of the heauen the Vine muſt lie againſt.

burning

burning Countries, as *Egypt* and *Barbaria*, vpon the North. *Plinie* would haue the Vine himselfe stand towards the North, and his spring, or shootes, towardes the South. A fitte ground, and well lying, being founde out, must be diligently digged, dounged, and weeded: all vnprofitable weedes must be pulled vp, and throwen away, least they should spring againe, and either corrupt the young plants, or hinder the labourer.

THRA. Before you come to trenching, I would gladly heare in what sort you plant your Vine, and what season is fittest for it.

MARIVS. I will first speake of the season, and afterwards of the planting. The Vine is planted according to *Virgils* rule, in the fall of the leafe, but better in the spring, if the weather be rainy, or colde, or the ground be fatte, champion, or a watrish valley: and best in the fall of the leafe, if the weather be drie and warme, the grounde dry and light, a barraine, or a rugged hill. The time of planting, in the spring (as *Columella* saith) endureth fortie daies, from the Ides of Februarie, vntill the *Æquinoctium*: and in the fall of the leafe, from the Ides of October, to the Kalendes of December. *Cassius* in *Constantine* being taught by experience, willes in watrie grounds you should rather plant in *Autumne*, when the leaues are fain, and the plants after the Vintage, deliuered of the burden of their clusters, sound and strong, before they be nipped with the frosts, for then they best agree with the ground, nature applying her selfe wholly to the nourishing of the roote. The time of graffing *Columella* saith, is of some extended from the first of Nouember, to the first of June, till which time the shoote or graffe may be preserued: but it is not well liked of him, who rather would haue it to be done in warmer weather, whē the winter is past, when both budde and ryude is naturally mowed, and safe from colde, that might annoy either the Graffe, or the Stocke: yet he granteth (when haste requireth) it may be done in the fall of the leafe, when as the temperature of the aire, is not much vnlike to the spring: for which purpose, you must chose a warme day, and no winde stirring. The Graffe must be round and sounde, not full of pith, but of buddes, and thicke of ioyntes, the tenant

The time for planting of Vines.

Graffing of Vines.

What Graffes to be chosen.

whereof must not exceede three inches, and smoothe, and euen cut: the stocke and the cleft must be well closed with Clay and Mosse. Those that grow toward the South, must be marked, which *Virgil* obseruing saith.

But on the barke they also note the quarter of the skie,
The order how it stood, and grew, and where the South did lie.

The like is to be done with all other Trees. Of planting of Vines, there is two waies, the one of the Roote, the other of the branch, or spray: the Roote is counted a great deale better then the branch or set, by reason of the forwardnesse, and vantage that it hath, in that it hath already taken roote. The roote is set in stiffe grounde, well digged and laboured, in a trench of three foote, the set or spraye, in a gentle and mellowe ground: in drie ground, it is neither good to set the Roote, nor the Branche in a drye season: it is beste to plante in the fall of the leafe in a hot season, and in a colde and moist, in the Spring: in much wet you must set them thinner, in great drieth, thicker: in what sort you shall make a store Garden for Vines, *Palladius* teacheth you. The set requireth a time to roote, and being remoued will beare the better fruite. The rootes doe beare fruite the seconde yeere, or sooner: the settes, or branches, scarse in the third or fourth yeere, though in some places sooner. *Pictorius* in *Constantine*, teacheth an easie and a readie way of planting the Quickeset, which is, to take of a strong and tenne yeers Vine, the longest and fairest branch, that groweth lowest, a foot from the ground, and laying it along in a Trenche of a foote depth, to couer it with earth the space of foure ioyntes, so that remaine in the toppe, exceede not two or three ioyntes: and if the branche be so long, as it will serue for two burnings, you may make thereof two rootes. You must not suffer two rootes to runne vppe vpon one stay, but allowe euerie roote his supporter. The Branches or settes that you meane to plant, you must cut from a verie fruitefull and flourishing Vine, that hath borne ripe and perfect good fruite, full of ioyntes, and not any waies tainted, but whole and sounde. Of such you must chuse your settes, and not

not of yong vines, that are weake and feeble, but such as are in their chiefe state. Moreouer, you must gather your set, not of the highest, nor the lowest, but from the middle of the vine: the sette must be rounde, smoth, full of knottes and iointes, and many little burgeons. Assone as you haue cut it off, loke that you sette it: for better doth it agree with the ground, and sooner growe. If you are driuen to keepe them, burie them in the grounde either lose, or losely bound: and if the time be long that you meane to keepe them, you must laye them in emptie barrelles, strawing earth vnder them, and vpon them, that the earth may lie round about them: and the barrell you must stop closely with claie, that there enter neither wonde nor aire, so shall you preserue them two moneths in their goodnesse. Such as are ouer drie, you must laie them in water foure and twentie houres afore you set them: and you must set two sets together, that though the one faile, the other may take: and if they both growe, you may take vp the lesser of them: you must not make a medley of sundry sortes, specially white and blacke together: but as *Columella* saith, must sort them seuerally. You must beware, that the sets haue not put out their springes, and that you set not a withered set. *Constantine* would haue the sette something crooked, affirming that it will the sooner take roote. You must lay about them three or foure stones, and then raise the earth, that it may equally with the doung be troden downe: for the stones keepeth the earth fiune, and as I saide before, coleth the roote. Both the endes of the set you must annoint with Dre doung, for the lulling of the wormes: as for the length, if it be full of ioyntes, it may be the shorter, if it haue fewe ioyntes, you must make it the longer, and yet not exceeding a foote in length, nor a shaftman in shortnesse, the one for being burnt with ouer drinesse in Sommer, the other least being sette to deepe, it be withgreat hardnesse taken vppe, but this is for the tenell ground: for vpon hilles, where the earth still falleth, you may haue them a foote and a handbreadth in length. *Florentine* would not haue the trench lesse then foure foote in deapth: for being sette shallowe, they sooner decay, both for the want of sustenance, and great heat of the Sonne, which

The length of the sets.

is thought to pearse foure fote into the ground: though some there be that thinke three fote sufficient for the plant. The Trenches for Vines, *Virgil* would not haue verie deepe: but deeper a great deale for Trees. Such Vines as you meane shall runne vpon trees, you must plant three cubites distant from the Tree: afterwardes, when they be well growen, and neede to be ioyned with the Tree (which you shall perceiue by his thicknesse) you shall late it volume in length, and burie it, till it come within a fote of the Tree, suffering the remaine to go at libertie, nipping of all the buddes with your nayle, except one or two, that it may the better prosper, which when it is growen vp, you must ioyne by little and litle to the Tree, that it may rest vpon it: which part of the Tree must be diligently proyned, and the springes and sciences, that growe out of the roote, must according to *Florentinus* be cut cleane away. The trees, as much as may be, must be forced to the East and the West, and both the tree and the Vine, must haue the earth well digged, and dounged about them. In rich ground, you may suffer the trees to growe in heigth, but in barraine grounde they must be pulled at seauen or eight fote, least all the substance of the earth be soked vp of the tree. After your planting, you must digge the ground euerie Moneth, and weede it, specially from the first of March, till the first of October: euerie thirtie day you must digge about the yong plants, and plucke vp the weedes, specially the Grasse, which except it be cleane plucked vp and cast away, though it be neuer so well couered, will springe againe, and so burne the plants, as they will make them both foule, and withered: the oftner you digge them, the more good you doe them. When the Grape beginnes to alter, you must in hand with your third digging, and when it is ripe, before none when it wareth hotte, and afternoue when the heate decreaseth, you must digge it, and raise the dust, which doing, defendeth the Grape both from the Sunne and the mist. According to *Virgils* mind, the Vine must be digged and weeded euerie Moneth: some would haue them digged all the Sommer long, after euerie deawe: others againe will not haue them digged, as long as they budde, or burgen, for hurting the springes, saying, that

The ordering of Vines after their planting.

Of digging & dounging of Vines.

it

it is enough to digge them thrise in the yere, from the entering of the Sunne into *Aries*, til the rising of the seuen starres, and the Dogge. Some againe woulde haue it done from the vintage before Winter, and from the Ides of Aprill before it take, and then againe before it flowre, and likewise before the burning houres of the day: in some places when they haue digged them, they do not straight waies couer them, but suffer the trenches to lie open all the Winter, in wette and rainy places they couer them soner, closing vp the Rootes with earth, and stopping all the passages of the water. Some make the trenches very deepe, and some not passing a foote deepe: and when they haue done, they couer them aloft with Ore doung, sheepes doung, or hogges doung, or of other cattell: Pigions doung is the hottest, and such as causeth the Vine fastest to growe, but maketh the worser wine. The doung must not be laide close to the Vine, but a little distant from it, wherby the Rootes that spreade abroad, may haue some helpe of it, and the doung must not touch the Rootes, for breaking of them: if there bee no dounge at hande, the stalkes of Beanes, and other pulse, wil well serue the turne, which both defendeth the Vine from frost and cold, and keepes them likewise from noisome wormes: the kernelles, and the stalkes of the Grapes, doe likewise supplie the want of doung, but the best of all, is olde stale vrine. The plants of a yere, or two yere olde, and so forth till fiue yeres, must bee discretely digged and dounged, according to their state: in sandie grounde, the best doung is of Sheepe and Goates, and in such sort you must digge the ground, that the earth that lieth highest, be cast to the bottome, and that which was at the bottome, be laide a loft: so shall that that was drie by the moysture within, be helped, and that which was moist and stiffe by the heate aboue, be loosened. You must also see that there be no holes nor pits in the Vineyarde, but that it lie euen. When you haue thus digged it, and that the Vines haue taken Roote the first yere, the Rootes that grow aboue, must be cutte away with a sharpe knife: for the Vine, if it be suffered to roote euery way, it hindereth the deepe downe growing of the roote. The Vines that are now of two yeres growth, we must digge

What doung is best for Vines.

Where the dung must be laide.

Pisse the best dung

The order of digging or stirring the ground.

and trench about two foote deepe, and three foote broad, according to the rule of *Socion*. Of those Vines that climbe vppon Trees, you must likewise cut of the springes that runne among the Rootes of the Tree, least the small Roote tangled with the greater, be strangled: and therefore you must leaue some little space betwirt the vine and the tree. Often digging causeth great fruitfulnesse: good heede must be taken, that the plantes be not hurt in the digging: also it must be digged before his flourishing, or shooting out of his leaues, for as immediatly therewithall he beginneth to thrust out his fruite. So he that diggeth after the comming forth thereof, loseth much fruite with the violent shaking, and therefore must digge the timelier. Cutting and dressing of the Rootes, you must begin in hand with at the Ides of October: so that they may be trimmed and dispatched afore Winter. After Winter, digge about the Rootes that you haue dressed: and before the Sunne enter the *Æquinoctium*, leuell the Rootes that you haue trimmed. After the Ides of Aprill, raise vp the earth about your Vine: in Sommer let the grounde be oftentimes harrowed. After the Ides of October (as I haue saide) before the colde come in, you must dresse the Rootes of your Vines, which labour laieth open the Sommer springes, which the good husband cutteth away with his Knife: for if you suffer them to grow, the rootes that grow downe will perishe, and it happeneth that the Rootes spread all aboue, which will be subiect both to colde and heate: and therefore what so euer is within a foote and a halfe, is to be cutte of, but so, as you hurt not the principall. You must make this riddance of the Rootes at euery fall of the leafe, for the first fiue yeere, till the Vine be full growen, after, you must dresse them euery fourth yeere: such Vines as are ioyned with Trees, for the vnhandsomenesse, can not be thus handled. Vines and Trees, the soner their Rootes be thus dressed, the stronger and weightier they will be: but such as growe vppon the sides of hilles, must so be dressed, as the vpper Rootes neare to the stocke may spreade largely, and vnderneath towardes the foote of the hill, the earth must be bancked to keepe the water and the mould the better. The old Vine must not haue his Roote medled withall for wythering,

Dressing of Vines.

nor

nor be plowed, for breaking of them, but the earth a little losed with a Mattocke, and when you haue thus drest the rote, laye doung about it. After this ridding of the Rotes, then followeth proyning, or cutting, whereby the whole Vine is brought to one twigge, and that also cut within two ioyntes of the earth: which cutting must not be in the ioynt, but betwirt the ioyntes with a slope cutte, for auoyding the water: neither must the cut be on that side that the bud comes out of, but on the contrarie, least with his bleeding he kill the budde. *Columella* appoynteth two seasons for the cutting of Vines, the spring, and the fall of the leafe, iudging in cold countries, the cutting in the spring to be the best, and in hotte Countreyes where the Winters be milde, the fall of the leafe: at which time both trées and plants, by the diuine and euerlasting appointment of God, yeld vp theyr fruite, and their leafe. Yet must not your settes be two nearely cut, except they be very feeble: but the first yeare they be set, they must be holpen with often digging, and pulling of the leaues monethly while they beare, that they may growe the better. *Pamphilus* in *Constantine* declareth the time of cutting, or proyning, to begin in Februarie, or March, from the fiftenth of Februarie, till the twentieth of March: some (he sayeth) thought good to cut them immediatly after the geathering of the Grapes, least by bleeding in the spring, they lose their sustenance: though being cut in the fall of the leafe, it springeth the soner in the spring, and if the cold of frost happen to come, it is spoiled. Therefore in cold Countreys, it were better to proyne it a little, then to cut it throughly, that is, to suffer the principall springs, and branches to growe. Againe, it is verie necessarie to cut them in the spring: the cuttes must be made with a very sharpe knife: that they may be smothe, and that the water may not stand in them, to the engendring of wormes and corrupting of the Vine: you must cut them rounde, so will the cut be soner growen out againe: but *Plinie* would haue them slope wise, for the better auoyding of the Water. The branches that be broade, olde, croked, or wrythen, cut awaye, and set young and better in their place. You must make an end of your cutting with as much spéede as you may, from the Ides

of December, till the Ides of Januarie: you must not touche your Vines with a knife, for *Columella* witnesseth, that Vines in Winter may not be cut. In cutting, remember well to cut it betwixt two ioyntes, for if you cut it in the ioynt, you spill it: let the cut be alwaies downewarde, so shall it be safe both from sunne, and weather. You must not cut them very early, but when the sunne hath drunke vp the frost, or the deaw, and warmed the branch: the springs of the settes the fyrst yeere, must be cut with good discretion, nor suffered to growe too ranke, nor cut too neare, but making the olde set to suffer a spring or two to growe out. Next vnto cutting, followeth the propping, or supporting of the Vine: and it is best for the young and tender Vine, not to be stayed vp with any strong stay, but with some small thing at the first, and whyle it is young, it must be deyntely tyed to the stay, with small twigges of Willowe, Elme, Browme, Russhes, or Strawe: this latter binding, is thought to be best, for the twigges when they ware drie, do pearce and hurt the rynde. There is an hearbe, which because of his aptnesse for tying of Vines, the *Sicyllians* call ἀμπελόδεσμον. The best stayes for Vines as *Plinie* sayeth, are made of Wyllowe, Oke, Reede, Juniper, Cypresse, and Eldar. And in an other place, he preferreth the Chestnut for this purpose, aboue all the rest. The best for the Vine, is the Reede, which well endureth fyue yeeres: gelding of the leaues, and cutting the Vine, is almost in one maner. The gelding of the leaues, or branches, must be done twise a yeere, to the ende that the superfluous springs and leaues may be plucked off. The fyrst (as *Plinie* wryteth) must be done within ten dayes after the Ides of May, before the Vine beginne to flowre: for about the tenth of June, both the Vine, and Wheate, the two noble fruites, do flowre. Of the second time, the opinions are sundrie, for some suppose it best to plucke off the leaues and branches, as sone as it hath left flowring: others, when the fruite is full ripe. The superfluous springs beeing yong and tender, are to be taken awaye, that the Vine may be more at liberty, and throughblowen with the Winde. This gelding, or cutting away the superfluous branches and leaues, is as needefull as the propping: for both

Propping of Vines.

Gelding, or plucking off of leaues.

the

the fruite doth prosper the better, and the propping the nerte yære will be the handsomer, and the Vine will be the lesse full of galles: for that which is cut being græne and tender, doth the soner and the soundlier recouer himselfe, and the Grape ripeth the better. Ten daies before the Vine beginnes to flowre, sæthat you geld it in this sort: cut off al ỳ superfluous branches, both on the toppe, and on the sides, but meddle not where the clusters growe, strike off the toppes of the branches for growing too ranke: such Grapes as growe towards the South, or the West, leaue them their branches to defend them from the heat of the Sunne: cut away most from the yong Vine, for ouerburdning him. After the heate of the Sunne beginneth to fade, away with the leaues, for hindring the Grapes of their riping: and while the Grape is a flowring, busie your selfe with digging about it. Such Vines as with thickneſſe of their leaues corrupteth their fruite, are to be ridde of their superfluous branches and leaues, a moneth before the gathering of your Grapes, that the winde may blowe the better through them: but the leaues that growe aloft in the very top, must not be medled with, but left as a defence, and shadowe against the heat of the Sunne: but if so be the ende of Sommer be giuen to much raine, and that the Grapes swell in greatneſſe, then hardly plucke off the leaues from the top also.

THRA. You haue tolde vs of a great deale of labour about Vines.

MARIVS. The Vine keeper must often goe about his Vines, and set vp his props, and make euen his yokes.

THRA. One thing I praie you, let me heare more, the signes and tokens of the ripeneſſe: for as I vnderstand, we may not be to busie in gathering them to sone, nor vse any lingring after they be ripe, without great harme.

MARIVS. You say true: for being gathered before they be ripe, they will make but small Vine, and not dureable. And againe, if you suffer them too long, you shall not onely hurt the Vine with the ouerlong bearing of her burden, but also if haile or frost happē to come, you put your vine in great danger. *Democritus* writeth, that the Grape endureth in his ripeneſſe

not

not aboue fiue daies, and therefore the iudgement of his ripenesse, is not alonely to be giuen vppon the sight, but vppon his taste, though *Columella* thinketh there can be no certaine iudgement giuen of the taste. But if the stones doe change their colour, and bee no longer greene, but be almost blacke, it is a signe the Grape is ripe. Some againe doe presse the Grape betwixt their fingers, and if they see the stone to slippe out smoth, without any thing cleauing to it, they thinke them meete to bee gathered, but if they come out with some part of the Grape, cleauing to them, they count them not to be ripe. Others proue them in this sort: out of a very thicke cluster they take a Grape, and as they behold the cluster well, wherein they see no change, they take it for a token of ripenesse. You must gather your Grapes, the Mone being in *Cancer*, *Leo*, *Libra*, *Scorpius*, *Capricorne*, or *Aquari*, and vnderneath the earth.

THRA. Is there no way to make the Grape ripe spedely?

MARIVS. *Plinie* teacheth, to rubbe ouer the Rotes with tart Vineger, and very old vrine, and thus to be often digged, and couered.

THRA. What order haue you for preseruing of your Grapes, when they be gathered?

MARIVS. Some keepe them hanged vp in the rofe of Chambers, and some in earthen pots close couered with wodden vessels. *Paladius* sheweth a way howe to keepe them vppon the Vine, till the Spring.

THRA. I pray you procede with the other fruite trees of your Orchards.

The Oliue.

MARIVS. Among other fruite trees nert vnto the Vine (as *Columella* saith) the chefe place is giuen to the Oliue, in Latine *Olea* in Greeke Ἐλαῖα ἤμερος. Of all other plantes it requireth least trauaile and charges, where as the Vine requireth most: and though it beare not euerie yeere, but euerie other yeere, yet is he to be borne withall, because he asketh neither cost nor labour: and if you bestowe any vpon him, he recompenseth it throughly, with the abundance of his fruite. And since there is so great profite and commoditie in this tree, and that the vses of it are so many, and so needefull, it is good reason

ſon to be diligent and carefull about it: he loueth a ground neither too hie, nor too low, but rather the ſide of a hill, ſuch as is the moſt part of Italie and Spaine: for in ſuch ground, the extreme heate of the Sunne, is ſomthing mollified with the cold blaſtes of the winde: for in Oliue Trees (as *Plinie* ſaith) the ſoile, and the clime, is of great importance: it delighteth in a warme, and a dry aire, and therfore in *Barbary, Sicil, Andaluſia*, ſundrie partes of Italie, ſpecially *Campania*, it proſpereth wonderfully: it liketh not too great heate, nor too much colde. And therefore in hotte countries, it ioyneth vpon the North ſide of the Hilles, and in colde, vppon the South ſide. It is thought, that if it ſtand about threeſcore Miles from the Sea, that it either dyeth, or proueth not fruitefull. The beſt ground is the grauelly ground, hauing a loft a little Chalke mingled with ſand: it is alſo good ground where the ſand, or grauell, is medled with rich moulde: yea the ſtiffe grounde, if it be rich and liuely, doth very well agree with this tree. Chalkie grounde is vtterly to be refuſed, and watry and marſhe ground, worſt of all. The like is a barraine ſande, and hungrie ſande: but you may ſet it well in corne grounde, where either the Wilding or the Walthelme hath growen: but betwirt the Oke and it, there is great hatred, for if the Oke groweth neere, it flieth awaye, and ſhrinketh towardes the earth: and though you cut downe the Oke, yet the very Rootes poyſoneth and killeth the pore Oliue. The like ſome affirme of the Trees called *Cerrus*, and *Eſculus*: for where they be pulled vp, if you ſet the Oliue, he dieth: ſo doth it (as *Plinie* ſaith) if it chaunce to be bruſed of the Goate. On the other ſide, betwirte the Oliue and the Vine there is great friendſhip and loue: and it is ſaide, that if you Graffe the Oliue vpon the Vine, it will beare a fruite that ſhal be halfe Grape, and halfe Oliue, called *Vuolea*, in Greeke Ἐλαιοστάφυλος, and Oliue Grape. There are ſundry wayes of planting of Olyues: ſome take the biggeſt branches from the Trees, and ſawing of the youngeſt plantes of two cubites in length, they ſet them orderly in the ground: ſome ſet the whole Tree together. Some againe cutting off the toppes, and all the branches, ſet the ſtocke, about the riſing of the ſtarre *Arc-*

turus.

turus. Many make them Impe Gardens in good ground and mellowe, ſuch as is commonly the blacke mould: herein they ſet the young branches, the loweſt, and the fayreſt, two or three inches in thickeneſſe, and very fertill, which they gather not from the body of the tree, but from the neweſt and lateſt bowes. Theſe they cut into pretty ſettes of a foote and a halfe in length, taking good heede that they hurt not the rinde, and paring the endes very ſmoth with a ſharpe Knife, and marking them with redde Oker, that they may knowe which way they ſtode afore, and ſo ſetting the loweſt parte into the ground, and the higheſt towardes the Heauen, they put them in the ground, and ſo they growe the faſter, and beare the better: for if you ſhould ſet them with the lower end vpward, they would either hardly growe, and proue vnfruitfull: and therefore they haue a regard of the ſetting of them. You muſt beſide, before you ſet them, rubbe ouer both the top and the foote, with doung mingled with Aſhes, and ſo ſet them deepe in the ground, couering them foure fingers thicke with rotten mould. You may chooſe whether you will ſet them all vnder the ground, or ſette ſome part within the ground, and ſuffer the reſt to appeare aboue the ground: thoſe that be ſet all within the ground, neede not to be marked, but ſuch as ſhall ſtand with one parte aboue the ground. *Didymus* would haue them ſo ſet as they may appeare foure fingers aboue the ground, and then to make a little trench for the receauing of the water: and this maner of planting with the bowes, is of *Didymus* beſt liked. Where you meane to plant, you muſt purge the ground of all other plantes, buſhes, and weedes: and the Trenches muſt ſo be made, as with the wind, the ſunne and raine, it may be mellowed and made crombling, that the plantes may the ſooner take rote. If your buſines require haſt, you muſt a moneth or two before, burne in the trenches either ſtickes, or reede, or ſuch thinges as will eaſily take fyre: and this you muſt doe diuers daies together. Your trenches muſt be three cubites, or there aboute in deapth, & forty cubites aſunder, whereby the trees may haue ayre enough: the firſt yere, ſecond, & the third, the earth muſt be trimed with oft̄ raking: the firſt two yeres you muſt not meddle with propping:

the

the third yeere, you must leaue vpon euery one a couple of branches, and often rake your Impe Garden: the fourth yeere, you shall of the two branches, cut away the weaker: being thus ordered, in the fift yeere they will be meete to be remoued: the stocke that is as bigge as a mans Arme, is best to be remoued: let it stand but a little aboue the ground, so shall it prosper the better. Before you remoue it, marke the part that stood South with a peece of Oker, that you may set it in like maner againe. You must first digge the trenched ground with Mattockes, and after turne in stone plowed earth, and sowe it with Barley: if there be any water standing in them, you must let it out, and cast in a fewe small stones, and so setting your Settes, cast in a little dounge. After the tenth of June, when the ground gapes with the heate of the Sunne, you must take heede that the sunne pearce not through the clefts to the Roote. From the entring of the Sunne into *Libra*, you must ridde the Rootes of all superfluous springes: and if the Tree growe vpon the edge of a Hill, you must with little gutters draw away the muddy water. The dounge must be cast on at the fall of the leafe, that being mingled in Winter with the mould, it may keepe the Rootes of the trees warme. The Mother of oyle must be powred vpō the great ones, & the mosse must be cut of with an iron instrument, or els it will yeeld you no fruite. Also after certaine yeeres, you must cut and loppe your Oliue Trees, for it is an old prouerbe: that who so plowеth his Oliue Garden, craueth fruite: who doungeth it, moweth fruit: who cutteth the Trees, forceth fruite. In the Oliue Tree, you shall sometime haue one branch more gallant then his fellowes, which if you cutte not away, you discourage all the rest. The Oliue is also grafted in the wilde Oliue, specially betwixt the rinde and the woode, and by emplastring: others graffe it in the Roote, and when it hath taken, they pull vp a parcell of the Roote withall, and remoue it as they doe other plantes. Those Olines that haue the thickest barkes, are grafted in the barke. The time of Grafting them, is from the entring of the Sunne into *Aries*, and with some from the xvij. of May, till the first of June. The time of geathering of Olives, is when the greater part of halfe the fruite wareth blacke,

and

and in faire weather: the riper the Oliue is, the fatter will be the Oyle. In gathering of Oliues, there is more cunning in making Oyle, then in making wine: the lesser Oliues serue for Oyle, the greater for meat. There is sundry sorts of Oile made of an Oliue, the first of all is rawe, and pleasantest in taste: the first streame that comes from the Pyelle is beste, and so in order. The best Oyle is about *Venafri* in *Italy*, and *Licinia* in *Spaine*: The next in goodnesse in *Prouence*, except in the fruitefull partes of *Barbary*. The Oliues that you may come by with your handes, you must either vpon the ground, or with Ladders gather, and not beate them downe: for those that are beaten downe wither, and yelde not so much Oyle as the other: and better is the Oliue that is gathered with the bare hande, then with gloues: there is an olde lawe for Oliues, bruise not the Oliue, nor beat him. Those that passe the reach of the hand, must bee rather beaten downe with Rodes then powles: the Oyle is encreased from the rysing of the Dearward, to the fiue teenth of the kalendes of October: after, the stone and the meate doe growe. Of Oyle, some part seruyth for meate, and other for the lowpling of the bosie: and therefore as *Varro* saith, it accompanieth his maister, not only to the Bathe, but also to the fielde: or where so euer he goeth. The Oliue wherof you make your Oyle, must be taken from the ground: and if it bee foule, must be washed: for the drying, three daies is sufficient: if it be frostie weather, they must be pressed the fourth daie: euery first heape must be put in earthen pottes, and Oyle vessels, where with hard and rough stones they are grinded. The gathered Oliue, if it lie to long in heapes, putrifieth by reason of heat, and makes vnsauerie Oyle. Pylles are more handsome for the making of Oyle, then the trough and the fote: for the Pylles may be handled with great discretion: the whole store may bee rayfed or let downe, according to the quantitie of the Berrie, least the stone which would marre the taste of the oile should be broken. The pressles cheefely, and the oile houses ought to bee warme, for the speedier running of the Oyle: which with colde would make the longer stay. And sith heate and warmth is so needefull, you must prouide that your house lie towarde the

Sunne,

Sunne: so shall you neede neither flame nor fire, which with smoke or sote, may corrupt the taste of your Oyle. The lawes and order of gathering, and bestowing of Oliue, hath *Cato* described: the manner of preseruing them is declared by *Columella*, which were too much for me to speake at this time.

THRA. Goe on then, and let vs heare what you can say of Apple trees: whose vse is more commonly knowen vnto vs.

MARIVS. The Apple, called in Latine *Pomum*, in Greeke μῆλον. There are that put this difference betwixt the Apple and the Nut, that what so euer fruit is to be eaten soft without, and hard within is an Apple, and the contrary a Nut. *Pomum* generally spoken, is to be vnderstode of all that the Greekes comprehended in the word ὀπωρα, as Peaches, Quinces, and Peares, whereunto the Lawyer agreeth: but in this place I speake of Apples, according to the common phrase: as for Quinces, Pomegranates, & Turkie Plomes, I will speake of in their due places. There are such sundry sortes of Apples, differing both in shape and sauour, as are scarcely to bee numbred. In the olde time the cheefest Apples were *Septians*, very great and rounde, *Martians*, *Claudians*, *Matians*, and *Appians*, so called of their first founders: some againe toke their names of their Countries, as *Camerians*, and *Grecians*: so others of their colours, as redde, sanguine, silken, and golden. We haue at this day that are cheefe in price the Pippen, the Romet, the Pomeroyal, the Marigold, with a great number of others, that were too long to speake of. There is but one maner of planting and graffing of them all, sauing that the Peach, the Lemon, the Abrecot, the Quince, and the Cytron, which are all of *Dioscorides* accounted in the number of Apples, require a little more diligent care, as shall be saide hereafter, then the others, for they are all both planted and grafted: the maner of an Impe Garden *Cato* describeth. Apple trees are set either in February, or in March: or if the Countrey be hotte and drie, in October and Nouember. But all kindes of Apples doe better prosper by graffing, and inoculation, or inbudding, as I said before, about March or Aprill, or what time so euer the sappe be in the rinde. They are also grafted by implaistring, about the tenth of June, though

Apples.

though some (as they say) haue had good successe in doing it, after the entrance of the Sunne into *Aries*, as I haue said before, where I spake of implastring and Grafting. The Apple is commonly Grafted vpon the Crab stocke, or vppon the Bramble, being first planted, and the yeere after cutte off within a foote of the earth: vpon this stocke you may Graffe (as I saide) the tender yong Graffes of any Apples. *Palladius* saith, you may graffe the Apple vpon the Perrey, the Hawthorne, Plome tree, Seruisse tree, Peach, Plane tree, Poplar, Willowe, and Peare: but in such difference of Countreyes, we can set downe no certaine order for them all: and therefore as farre as mine owne experience, and the knowledge that I haue learned of others will stretch, I will gladly shewe you. There are that according to the olde order, doe Graffe the Apple either vppon a wilde Perry, or vppon a Quince, whereof they haue a most excellent fruite, called of the olde writers *Melimela*. If you Graffe vpon the Plane tree, you shall haue a redde fruite: you may also well Graffe your Apple vpon the Damson tree, and if you Graffe vpon the Cytron, you shal haue them bearc, as *Diophanes* saith, fruite almost all the yeere long. The Apple loueth a fatte, and a good ground, well watred rather by nature, then by industrie. In mountaine countries, they must alwaies be set toward the South: it prospereth well enough, so it bee something holpen with the Sunne, neither do they refuse either rough, or marish groundes. A leane and a barraine soyle bringeth out Woorme eaten, and falling fruite: the noisome Woormes are destroyed with Hogges doung, mingled with mans Urine, and powred vpon the rootes. And if the tree be very full of Woormes, being scraped downe with a brasen scraper they neuer come againe, if the place whence you scrapped them, be rubbed ouer with Bullockes doung: some adde vnto Urine Goates doung, and powre vpon the rootes the lees of olde wine. The tree that is sicke, or prospereth not, is holpen being watred with Asse doung, and water fiue daies: they must be often watered at the setting of the Sunne, till the Spring be come out. *Plinie* writeth, that the water wherein Lupines hath beene sod powred vppon the tree, doth the fruite good. They say, if the

Against hurtfull woormes.

tree

Tree be much watred with vine, the fruite will be redde. Others againe set vnder their Trees Roses, thinking thereby to haue their Apples redde. Apple Trees (as I sayed before) must be sette euery sorte by them selues, as *Columella* biddeth, least the small trees be hurt of the greate, because they be not al of one grouth, nor strength. Beside, you must set them verie thin, that they may haue rome to shote out their branches: For if you sette them thicke, they will neuer beare well, and therefore you must sette them fortie, or at the least thirtie fote a sunder: the Apple declareth his ripenesse, by the blackenesse of his kernels. They are gathered after the fourteenth of September, or there about, according to their kinde, and not before the Mone be seuentéene daies old, in faire weather, and in the after none: Those that fall from the Tree, must be laied by themselues: it is better to pull them, then to shake them, least they be bruised in their falling. They are kept in faire loftes, vaultes, or colde places, with windowes opening toward the North, which in faire weather must be sette wide open: and therefore *Varro* would haue all Apple loftes haue their windowes North, that they may receiue the North aire: The South windes must bee shutte out: The blastes of the North winde, doth make them wrinkled and rugged: they must be laied thinne vpon Strawe, Chaffe, or Mattes. I had an Apple brought me out of Holland, that endured three yeeres: I haue a Tree of them here in this Orchard of his colour, called a Greening. You must laye euerie sort by them selues, lest sonderie sortes lying together, they soner rotte. Some vse to laie them in Nutte leaues, whiche both giueth them good colour, and good smell. They are also kept from rotting, if they be laied in Barlie, or Wheate. *Palladius* would haue them kept in earthen vessels close stopped, in Sesternes, or in Caues. *Apuleius* in *Constantine*, would haue euery Apple wrapped in Nutte leaues, and so laied vp: a great sort of waies beside of keeping them, you shall reade in diuers authours. Some to auoide the hurt of the Frosste, vse to couer them with wette Linnen clothe, which being frozen, the fruite that lieth vnder it, is preserued. Your Apples must be so laied vp as the stalkes stand downeward: neither must you touche any,

To keepe Apples.

but suche as you neede. Apples are hurtfull to bearing cattell, so as the sauour causeth them to tyre, as *Lucan* in his Asse witnesseth: the like is written of Peares, the remedy they say, is to let them eate some of the fruite afore. Of Apples, with certaine Milles for the purpose, they make a drinke called Cider, and a smallie drinke beside with water, and the refuse of the Apples strained: a good drinke to cole the thirst of the poore labourer. A kinde of Vineger also they make of Crabbes, and sowre Apples, which lying in heape together three or foure daies, they afterwards putte into a Pipe, or Tunne, wherewith they mingle Spring water, or Raine water, and so is it suffered to stand close couered thirtie daies, and after taking out what Vineger they need, they put in againe as much water. The Peare, in Latine *Pirus*, in Greeke ... and ..., chalengeth the nexte place, and is one of the chiefest beauties of the Orchard. The Apple Tree spreadeth in broade braunches, the Peare Tree riseth in heighth, and delighteth in a riche and a moist ground: it doth growe of the Kernell, and of the Pippin, but is a greate while before it come to good: and when it is growen, it degenerateth from them his olde good Nature, and therefore it is better to take the wilde plantes, and to set them in their ground in Nouember, and when they be well rooted, you may graffe vppon them. It is saied, that it so prospereth with often digging, and muche moisture, as it neuer loseth his flowre. You shall do greate good vnto it, if euery other yeer you bestowe some doung vppon it. Ore doung is thought to make greate and mallie Peares: some put to a little Ashes to make their taste the pleasanter. They are not alonely planted of the rootes, but also the verie little twigges, being plucked from the roote, will growe. If you will sette yong plants, let them be three yere olde, or at the least two yere olde before you sette them. Some againe take the faireſt braunches they finde vppon the Tree, and sette them as they do the Oliue: the time of grafting the Peare, is March and Aprill. *Plinie* saieth, you may well graffe it, when the blossome is on it, whiche I my selfe haue tried to be true. It is Grafted vppon the Quince, the Almonde Tree, the Pomegranate, the Apple, and the Mulberie Tree: if you graffe vppon

The Peare.

the

the Mulberie, your Peare shalbe red. *Virgill* teacheth to graffe it vpon an Ashe, whereas in deede it will agree with any stocke: the graffe must be the growth of a yere, and afore it be graffed, cleared of all the leaues & tender parts. And if you would haue the fruite pleasaunt, and the Tree fruitefull, you shall boare a hole through the stocke close by the grounde, and driuing in an Oken, or a Beechen pinne, couer it vp with earth: If the Tree prosper not, wash the rootes, and water them with lees of olde wine fiftene daies, so shall it beare the better and pleasaunter fruite. It shall neuer be hurt with wormes, if whē ye plant it, you do annoint it with the Gaule of an Ore: if the Tree (whose rootes haue bēn cutte) seeme not to prosper, *Palladius* his remedie, is to pearce the roote through, and to driue in a pinne made either of Oke, or Plometree. If your Peares be stonie, & choke Peares, digge vp the earth from the rootes, clense them of stones, and sift in good new mould againe in the place: let your Peare Trees stand thirtie foote a sunder, or little lesse: your Apple Tree farther, as I haue saied. They are kept preserued sondrie waies, some dipping the stalkes in boilyng Pitche, doe afterwards hang them vp, and so kepe them: others kepe them in newe boiled wine, or els in a close vessell: others in sand, some in flockes, and some againe couered with Wheate, or Chaffe: some are of opinion, there is no kinde of fruite, but may be preserued in Honie. Of Peares *Palladius* teacheth, as of Apples, to make both drinke and sause, the iuice being prest out with the presse: women haue a prettie dish made of Peares for their religious fastes, called *Castimoniale*. Next in order after Apples and Peares, commeth the Quince, which was first by *Cato* called *Cotoneum*, the Grekes call it Κυδώνιον, of the Citie *Cydon*, from whence it was first brought, the Italians *Melle cotogne*, the Spaniardes *Membrillo*, the Frenchmen *Vn coignier*: both the Grekes and *Virgill*, call them of the colour χρυσόμηλα, golden Apples, and *Struthia*, which kind (though they differ a little) are of this sorte: for *Columella* speaketh of three sortes of Quinces, *Struthia*, *Chrysomela*, and *Mustea*, which all serue both for health and pleasure. They are planted after the same maner that Peares & Cheries are: some affirme, that the set that haue

To keepe Peares.

The Quince.

bene ſette in March, or in Februarie, haue taken ſuch Rote, as they haue borne fruite the yeere after. They grow wel in cold and moiſte Countries, in plaine and Hillie groundes: In hotte drie Countries, you muſt ſette them in October. Many ſette them with the toppes and the ſette, but neither of them both is verie good: and being ſet of ſcience, they ſone degenerate. They are better Graffed in the ſtocke, then in the barke, and that in Februarie, or March: They receiue into their ſtockes, the Graffes (in a maner) of all maner of Trees, the Pomegranate, the Seruiſſe, al the ſortes of Apples, and make the fruite the better. The Quince Tree muſt be ſette in that order, that in the ſhaking of the Winde, they droppe not one vppon the other. When it is young, or newlie planted, it is helped with doung, or better with Aſhes: they muſt be watered as often as the ſeaſon is very drie, and digged about continually: In hotte Countries in October, or Nouember, in cold Countries in Februarie, or March: for if you doe not often digge about them, they will either be barraine, or beare naughtie fruite: they muſt be proined, cutte, and ridde of all encombraunces. If the Tree be ſicke, or proſper not well, the rote muſt be watred with the mother of oyle, mingled with the like quantitie of water, as *Didymus* in *Conſtantine* ſaith, or vnſleckt Lime medled with chalke, or Rozen and Tarre muſt be powred vpon the rotes: you ſhall gather them in a faire day, being ſound and vnſpotted, and verie ripe, and in the wane of the moone. They are beſt kept coffened betwixt two hollowe Tiles, well cloſed on euery ſide with claie: ſome lay them onely in drie places, where no wind commeth: others keepe them in Chaffe and Wheat: many in hony, ſome in Wine, and maketh the Wine more pleaſaunte. *Democritus* biddeth you beware, that you lay them not neare other fruite, becauſe with the aire they wil corrupt them. There is alſo made a kind of Wine of Quinces (being beaten and preſſed) and a little Honie and Oyle put vnto it: our countrie men make of them a precious Conſerue, and Marmelade, being congealed with long ſething, and boiled with Sugar, Wine, and ſpices. I will nowe ſhew you of the Medlar, which the Greekes call Μίσπιλον, the Latines *Meſpilus*, the Italians *Meſpilo*, the Spaniard

To keepe Quinces.

The Medlar.

Spaniard the *Mespero*, the Frenchemen *Mesplier*, or *Neffier*, the Dutchemen *Mespelen*: this Tree is also of the number of Apple Trees, and Peare Trees: it is planted in like maner as the Quince is: it delighteth in hote places, but well watred, though it doe well enough in colde. We haue seene it prosper very well among Okes and Woodes: for we haue seen great Woodes of them growing among Okes, that haue yerely yelded a great deale of money. Some saie it is planted of the science, in March or November, in a well dounged greund and mellowe, so that both the endes be rubbed ouer with doung. It is also set of the stone, but then it is very long before it come to any thing: it is excellently well graffed in the Bramble, the Pirrie, or the Apple. The Medlar that you meane to keepe, must be gathered before they be ripe: and being suffered to growe vpon the Tree, they last a great parte of the Winter: they are also preserued in sodden Wine, and Vinegar and Water: In *Catos* time they were not knowne in Italie. *Plinie* and others haue spoken of them: neither is it certaine, whether the old writers take them for Seruilles. *Plinie* speaketh of three kindes of them: The first kind hauing but three stones in them, called therefore *Tricoccum*. We haue at this daie two kindes, the one hauing here and there prickles, growing in euery Wood and Thickette, very sower afore it be mellowed, and made soft with Froste, and cold of Winter: the other hauing no prickles at all with a great fruite, which seemeth to be brought hereunto by diligent Planting and Graffing. The wood of the wilde Medlar we vse to make Spoakes for Wheeles of, and the twigges of them serue for Carters whippes. Nert vnto the Medlar for neighbourhode sake, we must speake of the Seruille, a high tree with a round berrie, or fashioned like an Egge: wherefore it is called ὠὸν as *Theophrastus* witnesseth, and the fruite ὠόμηλον, the Latines call it *Sorbus*, the Italians as the Latines, the Spaniardes *Seruall*, the Frenchemen *Cormie* or *Cormier*, the Dutchemen *Spereffelbaum*: The fruite growes in clusters as the Grape doeth: the wilde is better then the Garden fruite. It delighteth in colde places, and if you plante it in hotte Countries, it will ware barraine. It hath no prickles as

the Medlar hath, it groweth of the stone, the sette, the rote, or the science, and prospereth in a cold and wette soile vpon hilles: it is planted in Februarie and March in cold Countries, and in hotte, in October and Nouember: It is Grafted either vpon his owne stocke, or on the Quince, or Hawthorne, either in the stocke, or the barke.

THRA. I marueil how can you haue Pomegranates here, I pray you shew what order you vse.

Pomegranates.

MARIVS. Among the strange fruites, there is none comparable to the Pomegranate (so called I thinke) because of his Countrey *Carthage* and *Africa*, where the best doe growe: the tree (as yée see) is not hie, the leafe narrowe, and of a verie faire Greene, the flowre Purple, and long like a coffine, the Apple that is compassed with a thicke rinde, is al full of graines within: it is called of the Greekes ῥοὰ or ῥοιά. as well the tree as the fruite ῥοὰ γλυκεῖα ἢ ὀξεῖα. the Pomegranate sweete and sowre, it is called in Latine *Malum Punicum*, and *Malum Granatum*, in Italian *Mele grano*, in Spanishe *Granada*, in Frenche *Pomes de Granad*, in Dutche *Granatapffel*. This tree onely as the Figge and the Vine, the bodie being clouen, dieth not: the branches are full of prickles as the Goest is: it loueth both a hotte grounde, and a hotte Countrey, and liketh not watrie places. In some hotte Countries, it groweth wilde in the bushes: it is planted in the spring time, the rootes being watred with Hogges doung and stale. It is grafted vpon his owne stocke, and also vpon other Trees, and likewise of the sciences that grow from the rootes of the old tree. And though it may be planted sondrie waies, yet the best way is the branch of a cubite in length, smoothed with your knife at both the ends, and sette slopewise in the grounde, with both his endes well smeared with Hogges doung and stale. There is also an other waie of planting it, which is, to take a verie fruitefull stocke, which may be brought to the earth, and him after the maner of other trees they Graffe by insolliation, betwirte the barke and the rinde, and well and closely bind it after they set it in the grounde, not touching the grafted parte, but the partes beneath, annointing it with the mother of oile, and make it fast

with

with cordes, that it slippe not backe, till the branch bee growne. It much delighteth (as *Democritus* saith) in the Myrtill, in so much as the Rootes will meete and tangle together with great ioie. The fruite will growe without kernels, if as in the Vine the pith being taken out, the set be couered with earth, & (when it hath taken) the spring be pruned. There is as *African* reporteth, in euery Pomegranate a like number of graines, though they differ in bignes. *Basil* writeth in his *Hexam.* that the sowre Pomegranate will growe to be sweete, if the bodie of the træ nære to the Roote be pearced through, and filled vp with a fat Pitchtræ pin. You shall haue them endure a very great while, if they be first dipped in skalding water, and taken out quickly be laied in dry sand, or else in some heape of Wheat in the shadowe till they be wrinckled, or else so couered with chaffe, as they touch not one the other. Other say, it is best to kæpe them like Quinces, couered with plaster, or chalke: for in cold places they are kept without corrupting. The rinde of the Pomegranate is called in Latine *Malicorium*, the flowre of the Garden pomegranate *Dioscorides* calleth κόκκον, and of the wilde βάλαυστον.

THRA. I heare also, the outlandishe Citron is here very carefully planted.

MARIVS. The Citron, called also the *Median*, the *Persian* and the *Assirian* Apple, because it was first brought out of *Persia*, and from the *Medes*: others saie, it was first brought out of *Africa* into *Greece* by *Hercules*, and therefore *Varro* calleth it, the Apple of *Africa*: they are called in Greeke μηδικὰ, and in Italian *Citroni*, in Spanish *Zidras*, in Dutch *Geternapffel Pomerantzen*, in French *Citron*: the fruite is called in Latine *Hipericum*, and *Aureum malum*, the golden Apple, also the mariage Apple of *Iupiter* and *Iuno*: such of them as are yelowe, and of a golden colour, they commonly call Oranges: such as are of a grœnish pale yellowe, they call Cotrolles, or Citrons: those that are long fashioned like an Egge, if they bee yellowe, are called Citrons, if they bee grœne, Limons: if they be very great and rounde like Pompeons, they call them Pompadrons: the træ doth alwaies beare fruite, some falling, some ripe, and some springing, nature shewing in them a wonderfull

Cytrons.

fertilitie, as in the Woods that *Homer* describeth in the Orchardes of *Alcinous*. The leafe is like the Bay leafe, among that there growe prickles amongst them: the fruite is yellow, wrinckled without, sweete in sauour, and sowre in taste: The kernelles like the kernelles of a Peare, a great resister of poysons. The Tree is planted (as *Palladius* saith) sower manner of waies, of the kernell, the sciente, the branch, and the stocke. If you will set the kernell, you must digge the earth two foote euerie waie, and mingle it with Ashes: you must make short beddes, that they may be watred with gutters on euery side. In these beddes you must open the earth with your hands a hande breadth, and set three kernelles togither with the tops downeward, and being couered, water them euery day, and when they spring, leaue no weedes neere them: they will spring the sooner, if you water them with warme water. Others say it is best the graines being taken out in the spring, to set them diligently in good mellowed furrowes, and to water them euery fourth or fifth day: and when they begin to growe, to remoue them again in the Spring, to a gentle and a moiste ground, for it delighteth in much wette: if you sette the braunche, you must not set it aboue a foote and a halfe in the grounde, least it rotte. The science and the stocke, *Palladius* thinketh it better to be planted, and sheweth which way. If any man meane to cherishe this tree, let him defende it well from the North, and set it towarde the South, and the Sunne in the Winter, in frailes and balketes: wherefore, some that are carefull and diligent in the tendering of the tree, do make little vaults toward the South close couered, and within them neere the wal, they plant the Orenge, suffring the vaultes all Sommer to lie open to the Sunne, and to haue the heat therof: and assone as winter comes, they couer them straight with straw, or mattes, specially with the shales of gourdes. This tree delighteth to be continually digged about, they are grafted in hotte places in Aprill, in colde Countreies in Maie, not vnder the bark, but cleauing to the stocke hard by the roote: they may be grafted both on the Peare tree, and the Mulberie: but when they are grafted, must be fenced either with a wicker basket, or some earthen vessel. The fruit will be sweet, if

the

the kernelles hoſtœped in Water ſodde with Honie, or which is better in Sheepes milke. Such as you meane to kœpe, muſt be gathered in the night, the Mone being downe, and gathered with braunches and all, as they hang. Where the fruite burdeneth the tree, you muſt pull them off, and leaue but fewe on it, which will be the pleaſanter, and the kindlier fruite. It is at this day nouriſhed both in Germanie and Fraunce, and is planted in veſſelles full of earth, and in hotte weather is ſette abroade in the Sunne: in colde weather ſette in Sellers, or in hotte houſes. I haue ſœne in Germanie, certaine hot houſes of purpoſe made of Firre bordes, that in Winter haue warmed all the Garden, and in Sommer the frames taken away, haue giuen place to the Sunne. If while they be yong and little they bœ put into earthen veſſelles, or glaſſe, they growe according to the proportion therof: ſo that you may haue them faſhioned either like a man or like a beaſt, according to your fancie: But you muſt ſo order your mouldes, as the aire may come to them. But leaſt I kœpe you too long with theſe outlandiſh trœs, I will ſpeake ſomething of our owne trees, wherewith we are better acquainted: Among which wœ haue the Mulberie, in Latine *Moros*, in Greeke Μορεα, the fruite συκάμινον, in Italian *Moro*, in Spaniſhe *Mora*, in Frenche *Meure*, in Dutche *Mulbern:* this is accounted of all other trœs the wiſeſt, becauſe he neuer bloſſometh, till all colde weather be quite paſt: ſo that whenſoeuer you ſœ the Mulberie begin to ſpring, you may bœ ſure that winter is at an ende: he is ripe with the firſt, and buddeth out ſo haſtily, as in one night with a noiſe he thruſteth out his leaues: they die the hands (as *Plinie* ſaith) with the iuice of the ripe berrie, and waſh it off with the grœne berry: he changeth his colour thriſe, firſt white, then redde, and laſtly blacke: he loueth hotte places, and graueſtie, and delightes in digging and dounging, but not in watering: his Rootes muſt be opened about October, and the Lees of Wine powred vpon them: it is ſette of the ſtones, but thinne: it often groweth to be wilde: the beſt planting is the ſcience; and the toppes, a foote and a halfe long, ſmooth at both endes, and rubbed ouer with doung. The place wherin you ſet your ſettes, they couer with Aſhes mingled

The Mulberie Tree.

led with earth, but couer it not aboue fower fingers thicke. *Palladius* biddes you to set it in March, and to remoue it in October, or November. *Dioscorides* telleth, that the Mulberie may be planted in the fall of the leafe, by thrusting into the grounde the branches, after the order of the Figge tree, which I my selfe haue proued, specially, if the end that is cut to be wel bruised that it may the quicklier take roote: and so when you haue made your hole with a stake, thrust it in: it is best graffed on the Beech, and the white Poplar, either by grafting in the stock, or by inoculation: and so shal the berries be white. It is graffed also in the figge, and the elme, which in olde time they would not suffer, for feare of corrupting. Of the Mulberie is made a verie noble medicine for the stomacke, and for the gout: they wil longest endure (as it is saide) kept in glasses. The leaues doe serue to fede silkewormes withall, whereof some make a very great gaine, and set them rather for that purpose, then for the fruite.

THRA. What tree is that with the ruddie coloured fruit is like a Cherie?

The Cornel.

MARIVS. It is a Cornell Tree, called in Greeke κρανία, in Latine *Cornus*, in Italian *Corneolo*, in Spanish *Zereko seluestro*, in French *Cornier*, in Dutch *Cornelbaum*, the tree is thought neuer to exceede twelue cubites in height: the bodie is sound and thicke like horne, the leafe is like an Almonde leafe, but fatter, the flowre and the fruite, is like the Oliue, with many berries hanging vpon one stalke, first white, and after redde: the iuice of the ripe berries, is of a bloodie colour: it loueth both Mountaines and valleies, and prospereth both in moiste ground, and drie: it groweth both of the slippe, and of the sede. You must beware you plant it not neere to your Bees, for the flowre doth kil as many of them as tasteth it.

THRA. What tree is the same that groweth next vs?

Ziziphus.

MARIVS. That tree is called *Ziziphus*, in Greeke ὀνύχια, in Italian *Giuggiole*, in Spanishe *Azofeifa*, in Frenche *Iniube*, in Dutch *Burstbyrle*, the berries whereof, are like the Cornellberries, the flowre like the Oliue flowre, but more sweeter. *Columella* speaketh of two kindes thereof, the one redde, the other white, they are set of the stones, in hotte Countries

tries in Aprill; and in cold places in Maie, or els in June: you may sette both the stone, and the branche, it is very slowe in growing: if you set the plant, you must doe it in March in soft ground: but if you set the stone, you must set them in a little trench of a hand broad, three stones together, with their pointes downewarde: It loueth not to riche a grounde, but rather a light grounde, and a warme place: in Winter (as *Palladius* saith) it is good to lay stones about the bodie of the Tree. The next are Italian Filbertes, in Latine *Pistacea*, in Greeke *πιστάκια*, in Italian *Pistinachi*, in Spanish *Alhozigo*, in French *Pistaches*, in Dutch *Welsce pimpernus*, the leafe is narrowe and browne, for vpon the branches hang the Nuttes, like the Nuttes of the Pine. Of this Tree it is thought ther is both male and female, and therefore they growe commonly together, the male hauing vnderneath his shell, as it were long stones: It is grafted about the first of Aprill, but vppon his owne stocke, and vppon the Terebinthe, and the Almonde Tree. They are also sette (as *Palladius* witnesseth) in the fall of the leafe in October, both of the slippes, and the Nutte: It delighteth in a hotte and a moist countrie, and ioyes in often watring. Italian Filberts.

THRA. Because I remember you tolde me before, that of Plantes and Trees some doe growe of the seede, or fruite, and some are Grafted: and because I haue heard the Grafting of most of them, I would nowe faine heare you speake of such Trees as growe onely of the stone, or berrie.

MARIVS. Your remembrance is good: for though they commonly grow better when they be graffes, yet some there be that prosper the better being sowen, and will scarce growe any other way. And though some of the foresaied trees being sette, doe well prosper, as the Medlar, the Cornell, and diuers other, yet sometimes they ware wild, and are long before they come to perfection, which *Virgil* also affirmeth.

For that same Tree that of the seed, the stone, or berrie growes,
Doeth slowly spring, and long it is, ere any fruite he shewes:
And when it comes, it proueth wild, and doth degenerate,
And loseth that same relishe sweete, that longeth to his state.

but

but by Grafting it is restored againe: Some of them againe, how so euer they be sowen or sette, doe not degenerate or growe out of kinde, as the Bay, the Date, the Cipresse, the Peach, the Abricocke, the Damson, the Pistace, the Firre Tree, and the Cherie: and because they be not all of one order, I will tell you seuerally of the chiefest of them. To plant Trees of the seede, Nature (as I saied before) taught men at the first: the seede being deuoured of Birdes, and with the dounge let fall in the clefts of trees, where they after sprong and grewe.

The Baye. The Baie in Greeke δαφνη, in Latine *Laurus*, in all other tonges almost as in Latine. The berrie is called in Greeke δαφνοκαρπος, in Latine *Lauri Bacca*, in Italian *Bacche de lauro*, in Spanish *Vaya de laurel*, in Dutch *Lorboren*, a most gratefull Tree to the house, a porter to Emperours and Bishoppes, which chefely garnisheth the house, and standeth alwaies at the entrie. *Cato* maketh two kindes thereof, the *Delphick*, and *Cypresse*: the *Delphick* equally coloured and greener, with great berries, in colour betwirte greene and redde, wherewith the Conquerours at *Delphos* were wont to bee crowned. The Cypresse Baye hath a shorter leafe, and a darker greene, guttered (as it were) rounde about by the edges, which some (as *Plinie* saieth) suppose to be a wilde kinde: it groweth alwaies greene, and beareth berries: he shooteth out his branches from the sides and therefore wareth soone old and rotten: it doth not very well away with colde ground, being hotte of nature: it is planted diuers waies, the berries being dried with the North wind, are gathered and laide abroade verie thinne, least they cluster together, afterward being wette with Urine, they are set in furrowes, a handful deepe, and very neere togither: in March they be also planted of the slippe, and the science. If you set them of the slippe, you must set them not passing iv. foote a sunder: but so they growe out of kind. Some thinke, that they may be grafted one in an other, as also vpon the Seruisse and the Ashe: the berries are to be gathered about the beginning of December,

Nut trees. The Almond tree. and to be set in the beginning of March. Nut Trees are most commonly planted of the Nut, as all other shell fruites are. Of all Nutes the Almond is counted to be the worthiest, called in

Greeke

Greeke ἀμύγδαλα, in Italian *Mandorle*, in Spanish *Almeidras*, in French *Amandes*, in Dutche *Mandeles*, they are set in Februarie, and prosper in a cleare and hotte grounde, in a fat and a moyste grounde they will growe barraine: They cheeflie sette such as are crooked, and the yong plantes, they are sette both of the Slips, the Roote, and the Kernell. The Nuttes that you intende to sette, must be laide a day before in softe doung: Others steepe them in Water sod with Honie, letting them lie therein but onely one night, least the sharpenesse of the Honie spoile the Plant: and being thus ordered *Columella* saith, they will be both the pleasanter, and growe the better. The toppes and the sharpe endes you must set downeward: for from thence commeth the roote, the edge must stande towarde the North: you must set three of them in a Triangle, a handfull one from the other: they must be watered euery ten daies, till they growe to be greate: It is also planted with the branches, taken from the middest of the Tree. The Almonde is graffed not neere the top of the stocke, but about the middest, vppon the bowes that growe out. This Tree doth soone beare fruite, and flowreth before all others, in Januarie, or Februarie. *Virgill* accountes it for a Prognosticatour of the plentifulnesse of Corne.

When thicke the Nutte Tree flowers amidde the wood,
That all the branches laden bende withall:
And that they prosper well and come to good,
That yeere be sure, of Corne shall plentie fall.

The bitter ones (which are the wholesomer) are made sweet, if rounde about the Tree, foure fingers from the Roote, you make a little trenche, by which he shall sweate out his bitternesse: or else if you open the Rootes, and powre thereon either Urine, or Hogges doung: or if at the Roote of the Tree, you thrust in a fat wedge of Pitch Tree. By this meanes (as *Basill* saith) they will lose their bitternesse: but no Tree groweth sooner out of kinde, and therefore you must often remoue it, or Graffe it when it is great. Walnuttes, called in Greeke καρύα βασιλικὴ, in Latine *Inglantes*, in Italian *Noce*, in Spanishe *Neuzes*, Wallnuts.

Nuzes, in Frenche *Noix*, in Dutch *Groisse nusz*: they are sette in the grounde (as *Plinie* saieth) the seame downeward, aboute the beginning of Marche: some thinke, that they will growe as the Filbert doth, either of the slippe, or the rote: it groweth spedely, and liketh a drie and colde place, better then a hotte. The Nutte that you meane to set, will growe the better, if you suffer it to lie foure or fiue daies before in the water of a boye, and will prosper the more, if it be often remoued: those Nuttes (as it is thought) prosper best, that are let fall by Crowes, and other Birdes. If you pearce the Tree through with an Augur, and fill vp the place againe with a pinne of Elme, the Tree shall lose his knottie hardnesse, neither will he lose his fruite, if you hang by either Mallet, or a peece of Skarlet from a dounghill.

THRA. What is the reason you plant your Walnutte Trees rounde about on the outside of your Orchard, and not among your other Trees?

MARIVS. Because his shadowe is greate, and vnholsome, beside the hurt he doeth with his dropping. He sucketh out a great deale of good iuice from the ground: for as you see, they are verie mightie and high Trees, so as some of them are two or three fadome about: they occupie a great deale of rome with their standyng, and beguile the other Trees of their sustenaunce: Besides, there are certaine Trees they agree not well withall, and therefore haue I sette them on the outside of my Orchard, as standards to defend their fellowes from tempest and weather. Among Nuttes, is also to be recounted the Hasell Nuttes, a kinde whereof is the Filberte called in Greeke κάρυον, in Latine *Auellana*, in Italian *Nociuole*, in Spanishe *Auellanas*, in Frenche *Noysette*, in Dutche *Haselnuseż*: they are planted after the maner of the Almonde: it delighteth in claie and watrish grounds, and vppon hilles, being well able to abide the colde. They were first brought into *Asia* and *Greece* from *Pontus*, and therefore called *Pontica*, and *Heracleotica*. &c.

Hasel-nuttes.

Filbertes.

Among the Nuttes also chalengeth the Chestnutte his place, though he be rather to be reckoned among Maste, whereby is called the Nutte, or Maste of *Iupiter*, in Greeke διὸς βάλανος, in Latine *Castanea*, in Italian *Castagne*, in Spanishe *Castaña*, in Frenche

Chest-nuttes.

Frenche *Castagnes*, in Dutche *Kastey*: it loueth well to growe on mountaines, and in colde countries: it hateth waters, and desireth a cleane and a good mould: it misliketh not a moist grauelly ground, and ioyeth in a shadowie and Northerly bancke: it hateth a stiffe and a redde claie grounde, it is planted both of the Nut, and the set: it is better planting wodes of them of the Nut, then of the set, otherwise the safer waie were the set, which in two yeres beareth fruite. It is planted whē the sunne is in the *Æquinoctial*, both of the science, the set, the branche, and the rote, as the Oliue is. The Chestnuttes that you meane to sowe, must be verie faire and ripe, the newer they be, the better they growe: you must not set them after that sort that you sette Almondes, or Filbertes, but with the sharpe end vpward, and a sote a sonder: the furrow must be a shaftman deepe. You were better (as I saied) to make your Groue of the Nutte, then of the settes, whiche will be meete to be filled for staies in seuen yere. *Columella* writeth, that the Chestnutte meete for the supporting of Vines, if he be sowed in well digged grounde, doeth quickly spring, and being felled after fiue yeres, it prospereth like the Willow: and being cutte out in staies, it lasteth till the next felling, as shall be shewed hereafter, when we speake of Wodes. They will also haue the Chestnut to be grafted on the Walnut, the Beech, and the Oke: it hath been seene, that where they growe two and two together, they prosper the better. The Pine, in Greeke πίτυς, in Latine *Pinus*, in Italian and Spanish *Pino*, in Frenche *Pin*, in Dutche *Hartzbaum*, is planted not muche vnlike to the Almond, the kernels of the keie clockes being set as the Almond is: they are gathered in Julie, before the *Caniculer* windes, and ere the Nuttes, the huske being broken, fall out. The best time of sowing them, *Palladius* reckoneth to be October, and November: this tree is thought to be a nourisher of all that is sowen vnder it. The Pitch tree is called in Greeke πίτυς, in Latine *Picea*, in Italian *Pezzo*, in Spanish *Pino negro*, in Dutche *Ratdannenbaum*, but I come now to the Cherie. The Cheritree, in Greeke κερασία, the fruite κεράσια, in Italian the Tree *Ceraso*, the fruite *Ceraso*, and *Ciregie*, in Spanishe *Cerezo*, and *Cereza*, in French *Cerisier*, and *Cerise*, in Dutche

the Cherie Tree.

Dutche *Kirſbaum*, *Kerſen*: the trée is eaſie to be planted, if the ſtones be but caſt abroad, they will growe with greate encreaſe: ſuch is their forwardneſſe in growing, that the ſtayes, or ſupporters of Vines, being made of Cherie Trée, are commonlie ſéene to growe to be Trées. They are grafted vpon the Plome Trée, vppon his owne ſtocke, vpon the Plane Trée, and on the Bramble, but beſt vppon the wilde Cherie it ioyeth in béeing grafted, and beareth better fruite: if you graffe them vppon the Vine, your Trée ſhall beare in the Spring: the time of grafting, is either when there is no Gumme vpon them, or when the Gumme hath left running. They remoue the wilde plante, either in October, or Nouember, that the firſt of Januarie or Februarie, when it hath taken rote, it may be grafted vppon. *Martiall* would haue you graffe it in the ſtocke: but in déede it proſpereth better, being grafted betwirt the barke and the woode. It delighteth to bée ſette in déepe trenches to haue rome yenough, and to be often digged about. It loueth to haue the withered bowe continuallie cutte awaie: it groweth beſt in colde places, and ſo hateth doung, as if it be laid aboute them, they growe to be wilde: it is alſo planted of the ſlippes, and will beare his fruite without ſtone: if in the ſetting of the ſette, you turne the vpper end downeward. Others will, that the trée being yong and two foote high, be ſlit downe to the rote, and the pith taken out of both ſides, and ioyned together, the ſeames cloſe bound about, and couered with dung: which within a yere after, when it is well growen, the young graffes (which hitherto haue borne no fruite) if you graffe them, will beare Cheries without ſtones, as *Martiall* ſaieth. There are ſundrie kindes of Cheries (as *Plinie* reporteth, or *Apronianus*) that are redder than the reſt, *Actianus* as blacke as a cole: which kinde in Germanie yet at this day, they cal *Ackliſche kirſen*, *Celicians*, that are round. *Plinie* in ſpeaking of the ſundrie ſorts, preferreth the *Duracins*, which in *Campania* they were wonted to call *Plinians*: and a little after he ſaieth, vpon the banks of the Rhine, there grow alſo *Kerſis*, of colour betwirt blacke, red, and greene, like the Iuniper beries, when they be almoſt ripe: in which the common ſort of bookes haue *Tertius* for *Kerſis* amongſt the Germanes: for *Plinie*

whereas

whereas in many places he vsurpeth the Dutch wordes, as in the 9. 10. 17. and 18. booke, and in diuers other places, which being not vnderstanded of the Latine, came altogither corrupted to the posteritie. There are also Bay Cheryes, grafted at the first in the Baye, and haue a prettie pleasant bitternesse: at this day, the small Cheryes are best esteemed, growing vpon a lowe bush with short stalkes, round fruite, and very red, much meate, soft, and full of licour. It is saide they will beare very timely, if you laye Lime about them: it is good to gather them often, that they which you leaue, may ware the greater: for setting and planting of Cheryes, you may read a great sorte of rules in the gatheringes of *Constantine*. There are also founde a kinde of Cheryes growing wilde in the Woodes, and Hedgerowes, with little berries, some redde, some altogither blacke, which the Farmers in the Countrey doe vse for to fatte their Hogges withall. The Plome Tree, in Greeke κοκκυμηλος, the fruite κοκκυμηλα, in Latine *Prunus* and *Pruna*, in Italian *Prune* and *Succine*, in Spanishe *Ciruelo* and *Ciruela*, in French *Prune*, in Dutch *Proumen*, it is planted from the middle of Winter, till the Ides of Februarie: but if you set the stones at the fall of the leafe, let it be done in November, in a good and mellowe grounde two handfuls deepe: they may be likewise set in Februarie, but then they must be steeped in lie three daies, that they may soner spring: they are also planted of the yong settes that grow from the bodie of the tree, either in Januarie, or in the beginning of Februarie, the rootes being well couered with doung: they prosper best in a rich and a moiste grounde, and in a colde Countrey: they are grafted towarde the ende of March, and better in the clouen stocke, then in the barke, or else in Januarie, before the Gumme beginne to droppe out: it is Grafted vppon his owne stocke, the Peach, and the Almond. There are sundry sortes of Plomes, wherof the Damson is the principall, loying in a drie grounde, and in a hotte countrey, and is grafted as the other Plomes are. There are diuers coloured Plomes, white, blacke, purple, and redde: Wheate Plomes, and Horse Plomes, wherewith they vse to fatte Hogges. The finger Plomes are most commended, being of length of a mans

Plome trees.

finger, which are brought vnto vs from *Bohemia*, and *Hungarie*, and *Iulians*, and *Noberdians*, being blewe in colour, but later. The Damsons are dried in the sunne vppon Lattises, Leades, or in an Ouen, some doe dippe them before, either in sea water, or in Wine, and after drie them. The Peache trée, called in Greeke περσικιμηλον, the trée περσικη in Latine *Persica*, in Italian *Perseo*, in Spanish *Duraſuo*, they are also called *Rhodocina*, and *Dorocina*, or *Duracina*, whereof there are foure kindes: but the cheefest are the *Duracins*, and the Abricocts: in Nouember in hotte countries, and in others in Ianuarie, the stones are to be set two foote a sunder in well dressed grounde, that when the yong trées are sprong vppe, they may be remoued: but in the setting you must set the sharpe ende downward, and let them stand two or three fingers in the ground: whersoeuer they grow, they reioice most in watry groundes, which ground if you want, loke that you water them abundantly, so shall you haue great store of fruite. Some would haue them set in hotte countries and sandy ground, wherby they say, their fruit will longer endure: the better will also the fruit be, if as soone as you haue eaten them, you set the stone, with some part of the fruite cleauing to it: it is Graffed either on himselfe, the Almond, or the Plome trée. The Apples of *Armenia*, or Abricock, doth farre excell the Peach, vsed as a great daintie among noble men, and much desired of the sicke: they are best graffed in the Plome, as the Peach in the Almonde trée: the fairest graffes that growe nert the body of the trée are to be chosen and graffed in Ianuarie, or Februarie, in cold countries, and in Nouember in hot: for if you take those that growe in the toppe they wil either not grow, or if they grow, not long endure. You shall inoculate, or inbudde them in Maie, or Aprill, the stocke being cut aloft, and many yong buddes set in: neither must you suffer them to stande very far one from the other, that they may the better defend themselues from the heat of the Sunne. The Frenchmen, and our Gardners also, after the Italians order, doe Graffe the Abricock, taking a Graft (not full a finger long) or the bud that is well shote out, with a little of the rind cut off, and slitting the rinde of a yong Plome trée crosse-

The Peach tree.

The Abricottes.

wise

wise, they set them in, binding them well about with Hempe, or Towe, and that in the end of June, or in July, and August. Some thinke they will be redde, if they be either grafted in the Plane tree, or haue Roses set vnderneath them: they will also be figured, or written in, if seauen daies after that you haue set the stone, when it beginneth to open, you take out the kernel and with Vermilion, or any other colour you may counterfaite what you will, after the stone closed vp about it, and couered with Clay, or Hogges doung, you set it in the ground. Again, you shall haue them without stones, if you pearce the tree thorowe, and fill it vp with a pinne of Willowe, or Cornel tree: the pith being had out, the Rootes of the tree must be cutte and dressed in the fal of the leafe, and dounged with his own leaues: you shall also at this time proine them, and rid them of all rotten and dead bowes. If the tree prosper not, powre vpon the rootes the lees of olde Wine mingled with water. Against the heat of the sun, heap vp the earth about them, water it in the euening, & shadow them as wel as you may. Against the frosts, lay on doung enough, or the lees of Wine medled with water, or water wherein Beanes haue bene sodden: if it be hurt with wormes, or such baggage, powre on it the wine of Oren, medled with a thirde part of Vineger. The Date tree in Greeke [illegible], in Italian, in Latine, and in Spanish *Palma*, in French *Arbor de Dattes*, in Dutch *Dactelenbaum*: the fruite in Greeke [illegible], in Latine *Palmula*, in Italian *Datoli* in Spanishe *Dattiles*, in French *Dattes*, in Dutch *Dactelem*, it groweth in a milde grauelly ground, and delighteth in a watrie soile: and though it desire to haue Water all the yeere long, yet in a drie yeere it beares the better: and therefore some thinke, that dong is hurtfull vnto it. About the riuer *Nilus*, and in the East partes it groweth plenteously, where as they vse to make both wine and bread of it: this tree in *Europe* (for the most part) is barraine though it be planted of many for noueltie sake. The stones of Dates are planted in trenches of a cubite in depth and breath, the trenche filled vp againe with any maner of doung, except Goates doung: then in the middest of the heape set your stones so, as the sharper part stand vpward: other would haue it stand

The Date.

towarde the East: and after, when first they haue sprinckled theron a little Salt, they couer them with earth, well medled with doung: and euery day while it springeth, they water it: some remoue it after a yeeres growth, other let it growe till it be great. Moreouer, because it delighteth in Salt ground, the rootes must be dressed euery yeere, and salt throwen vpon them: and so will it quickly growe to be a great Tree. The settes are not presently to be put in the ground, but first to be set in erthen pottes, and when they haue taken roote, to be remoued. Date Trees haue such a delight one in the other, that they bend themselues to touche together, and if they grow alone, they ware barraine. They are planted (as *Plinie* saith) of the branches, two cubites long, growing from the toppe of the Tree: also of the slippes and sliuers. The same *Plinie* affirmeth, that about *Babylon*, the very leafe (if it be set) doth growe.

THRA. I remember you tolde mee once, the spring and science that groweth out of the rootes of some Trees, will very well be planted.

MARIVS. I told you before, that diuers of the Trees whereof I spake, might be planted of the branches, and of the sciences, hauing some part of the Roote plucked vp with them: and so I said the Chery might be planted, as also the Hasell, the Laurell, the Myrtell, and the Medlar: likewise, the fairest branches slipped of, and the endes a litle bruised, and thrust into the ground, commonly doe growe to be Trees, as I my selfe haue tried both in the Mulbery, the Peare tree, and the Apple tree. One thing I will adde beside, that the Trees that beare fruite ouer hastely, doe either neuer come to their iust bignesse, or the fruite that they beare, doth neuer long endure: wherefore I thinke sprang first that lawe of Moses, that fruite Trees should for three yeeres be counted vncircumcised, and their foreskinnes with their fruite, should be circumcised: that is, the burgens and blossomes should be plucked of, lest he should beare before his time, or when he hath borne, lose his fruite: but I keepe you too long in the describing of my Orchard.

THRA. O no, I rather (whilest I heare you) imagine my selfe to bee amongst them, planting and viewing of their fruites:

fruites: but now remaineth that in ſtæd of a concluſion to your talke, you declare the order of preſeruing them, to that end ſpecially, that thoſe thinges that are appointed for remedie (being not duely, or in time adminiſtred) be not rather a hurt, then a helpe.

MARIVS. Your motion is good: firſt therefore, and generally, dounging and watring is needefull for fruite trees, a very fewe excepted: and herein hed muſt be taken, that you doe it not in the heate of the Sunne, and that it be neither too newe, nor too olde: neither muſt it be laide cloſe to the foote of the tree, but a little diſtaunce off, that the fatneſſe of the doung may be druncke in of the roote. Pigeons doung, and Hogges doung, doe alſo heale the hurtes or woundes of trees. The water wherewith we water them, muſt not be fountaine water, or well water, if other may be had, but drawn from ſome muddie Lake, or ſtanding Poole. Moreouer, you muſt take hede, (as I alſo tolde you before) when wee began to talke of planting of an Orchard) that your trees ſtand a good diſtance aſunder, that when they are growen vppe, they may haue rome enough to ſpread, and that the ſmall and tender, be not hurt of the greater, neither by ſhadowe, nor dropping. Some would haue Pomegranate trees, and Myrtels, and Baies, ſet as thick together as may bee, not paſſing nine foote aſunder: and likewiſe Chery trees, Plome trees, Quinces, Apple trees, and Peare trees, thirtie foote and moe aſunder: euery ſorte muſt ſtande by themſelues, that (as I ſaide) the weaker be not hurt of the greater. The nature of the Soyle, is herein moſt to be regarded: for the Hill requireth to haue them ſtande nearer together, in windy places you muſt ſet them the thicker. The Oliue (as *Cato* ſaith) will haue fiue and twentie foote diſtaunce at the leaſt. You muſt ſet your plantes in ſuch ſort, as the toppes be not hurt, or bruſed, nor the barke, or rinde flawed off: for the barke being taken away round about, killeth any kind of tree, You muſt alſo haue a regard of the ſhadowe, what trees it helpeth, and what trees it hurteth. The Walnut tree, the Pine tree, the Pitch tree, and the Fyre tree, whatſoeuer they ſhadowe, they poiſon. The ſhadowe of the Walnutte tree and the

Sadow of trees.

Oke is hurtefull to Corne: the Wallnut trée with his shadow also, is hurtfull to mens heads, and to all thinges that is planted neare it. The Pine trée with his shadowe likewise, destroieth young Plantes, but they both resist the winde, and therefore good to enclose Vineardes. The Cypresse, his shadowe is very small and spreadeth not farre. The shadowe of the Figge trée is gentle, though it spread farre, and therefore it may safely enough grow amongest Vines. The Elme trée, his shadowe is also mild, nourishing whatsoeuer it coucreth. The Plane trée though it be thicke and grosse is pleasant. The Poplar hath none, by the reasō of the wauering of his leaues. The Alder trée hath a thicke shadowe, but nourishing to his neigbours. The Vines is sufficient for him selfe, and the mouing of his leafe and often shaking, tempereth the heat of the sunne, and in great raine well coucreth it selfe. The shadowe of all those, is commonly milde and gentle that haue long stalkes: the dropping of all trées is nought, but worst of all those, whose branches grow so as the water can not redily passe through: for the dropes of the Pine, the Oke, and the Mastholme, are most hurtfull, in whose company you may also take the Walnutte: the Cypresse (as *Plinie* saith) hurteth not. Moreouer, proyning and cutting, is very good and necessarie for trées, whereby the dead and withered bowes are cut away, and the vnprofitable branches taken of: but to proyne them euery yére is naught, though the Vine requireth cutting euery yére: and euerie other yére, the Myrtill, the Pomegranate, and the Oliue, whereby they will the soner beare fruite: the others must be the seldomer proyned. Oliue trées must be proyned in the fall of the leafe, after the setting of the seuen starres: and first, they must be well dounged, as a help against their hurtes. You must cut away all the olde rotten Branches that growe in the middest, and such as growe thicke, and are tangled together, and al the waterbowes, and vnprofitable branches about them: the olde ones are to bée cutte close to the stocke, from whence the newe springes will arise. Scarifiyng also or launcing, is verie holesom for the trées, when they are screined with their leaues, and drinesse of their barkes: at which time wée vse to launce the barke

Dropping of trees.

Proyning

Scarifiyng.

barke with a sharpe knife, cutting it straight downe in many places: which, what good it doeth, appeareth by the opening and gaping of the rinde, which is straightwaies filled vp with the body vnderneath. You must also trime and dresse the rootes of your Trees after this sorte. You must open the ground round about them, that they may be comforted with the warmth of the Sunne, and the Raine, cutting away all the rootes that run vpward. The trees that you remoue, must be marked which way they stood at the first: for so teacheth *Virgil*. Ablaqueation. Remooving.

And in the barke they set a signe,
To know which way the tree did growe:
Which part did to the South encline.
And where the Northren blasts did blowe.

Also, you must consider well the nature of the Soile, that you remoue out of a dry ground, into a moist, and from a barraine hill, to a moyste plaine, and rather fatte, then otherwise. The yong plants being thus remoued, must in the second or third yeere be proyned, leauing still about three or foure Branches vntouched, so shal they the better grow: thus must you vsually doe euery other yeere. The olde tree we remoue with the tops cut off, and the rootes vnperished, which must be helped with often dounging and watering. Apple trees that blossome and beare no fruite, or if it beare, they sodenly fall away, you shall remedie by slitting of the roote, and thrusting in of a stone, or a wodden wedge. Also if you water your trees with vryne that is old, it greatly auaileth (as they say) both for the fruitfulnes, and pleasantnesse of the fruite. If the tree decaye by reason of the great heate of the Sunne, you must raise the earth about it and water the Rootes euery night, setting vp some defence against the Sunne. To cause their fruit to be quickely ripe, you must wet the little Rootes with Vineger and vrine that is old, couering them againe with earth, and oft digging about them. The vrine of men, if it be kept three or foure moneths, doth wonderfull much good to plants, which if you vse about Vines or Apple trees, it doth not onely bring you great encrease, but also giueth an excellent taste & sauour, both to the fruit and the wine: When trees bear not, or holde not their fruite, a remedie.

wine: you may also vse ỹ mother of oyle, such as is without salt, to the same purpose, which both must spedely be vsed in winter.

THRA. We see that frostes and mistes, do often times great harme to trees, haue you any remedy against it?

MARIVS. Against frostes and mistes, you must lay vp round about your Orchard, little Fagottes made of stalkes, rotten bowes, or strawe, which when the frostes, or mistes, arise, may be kindled, the smoke whereof auoideth the daunger. You must haue also drie doung amongest your Vines, which when the frost is greate, you may set a fire: the smoke whereof dispearseth the frost.

THRA. What if the trees be sicke, and prosper not?

MARIVS. When they haue any such sickneſſe, they vse to powre vpon the Rootes, the lees of wine mingled with water, and to sowe Lupines round about them. The water also wherin Lupines haue beene sod, powred round about, is very good (as *Plinie* saith) for Apple trees.

THRA. Trees are oftentimes also hurt with wormes.

MARIVS. If your trees bee troubled with wormes, there are diuers remedies, for the iuice of wormewood destroyeth the Caterpillers. The seedes or grayne, that are steeped in the iuice of Sengreene, or Houseleeke, are also safe from any wormes: also Ashes mingled with the mother of Dyle, or the stale of an Ore, medled with a third part of vinegar. Moreouer they say, that the trees that are smoked with Brumstone, or Lime, are safe from hurtfull vermine: *Galbanum* likewise burnt vpon the coles, driue them away. The blades also of Garlicke, the heades being of, so burnt (as the smoke may passe through the Orcharde) doth destroye the Caterpillers: some mingle Swte with the seedes, and sprinkle them with water: *Democritus* writeth, that a woman in her vncleanneſſe, vngirt, and her Heare hanging about her shoulders, if she go bare fote rounde about the place, the Caterpillers wil presently fal: but perhappes I trouble you with this tedious, or long discourse of hearbes, plantes, and trees, and therefore though there be much more to be spoken of, least I should seeme to ouer wearie you, I will make an ende.

THRA.

THRA. A trouble? no, you haue done me a singuler great pleasure, in declaring vnto me the right ordring of a Garden, and an Orchard, which not throughly entreated of by others) you haue briefely, and perfectly, to our great commoditie described. And whereas you haue largely spoken of our trees at home, it remaineth for you to say something of the disposing of Woodes. It was my chaunce to passe yesterday, by a great Wood of Okes, and Coppisse, planted in very good order, and hard by, a Willowe groue vpon the side of a Riuer, excellently wel ordered, where the Fældes were enclosed rounde about with great Elmes, which greatly beautifieth your dwelling, and yeld (I warrant) no small profite: I therfore greatly desire to heare some thing of this part of husbandry.

MARIVS. Though it be without my couenant, and that you demande more then I promised, yet since you force mee, I will not refuse it, least you should thinke I would faile you in any thing. As touching Woods, *Ancus Martius* (as *Petrus Crinitus* writeth) was the first in Rome that euer delt in them: the old Fathers had alwaies a speciall regard of Woods wherfore *Virgil* saith: Of Wods.

Yf that of Woods I frame my song,
Woods vnto Princes doo belong:
Yf that of Woods I list to sing,
Woods may full well beseeme a King.

It was ordained by the Romanes, that the Consuls shoulde haue the charge of the Woods, that there should no Tymber bee wanting for building of Houses, and Shippes, and other Tymber workes, both publique, and priuate. The state of *Venis* at this day, obserueth the same order, pointing a priuate officer for their Woodes, who hath in charge as well to see to the yearely planting of them, as to let that there be wanting no Tymber for their necessary vses. The Wood that you tolde me you passed by, is of Okes, Beeches, and other Waste trees: some part serving for tymber, and other for fewell. Of these therefore will I first beginne to speake, and then of Oliue Groues and Willowes, some of them be wilde, and grow of them selues, not needing any loking to, but such as daylie

experience

erperience shewes, are nothing so good, as those that are planted. Woodes and Forestes, doe cheefely consiste of Oke, Beeche, Fyre tree, Byrche, Pine, Pitche tree, Mastholme, Corke, wilde Oliue, Medlar, Crabbe tree, Iuniper, Cornell, and Pyrry: other Woodes haue other trees, according to the nature of the ground. The great Wood of Hartelswald in Germany, as it runneth through diuers Countries, beareth in some place onely Oke, in others Beeche, in others Fyres. The Forest of *Arderne* for the most parte beareth Oke: *Montificello*, Larsh, Fyre, Cornell, and Tamarice. *Monte D. S. Gothardo*, great abundance of Chestnut Trees. These wylder sorte, though they growe of them selues, may yet well be planted, if you haue meete grounde of the Acorne, and the Berry: eache of them liketh some one kinde of grounde better then an other, as first *Theophrastus*, and after *Plinie* hath declared. In the mountaines delighteth the Fyre tree, the Cedar, the Larsh, the Pitche tree, and such as beare Rosyne: as also the Holme, the Terebinth, the Chestnutte, the Mastholme, the Oke, the Beeche, the Iuniper, the Cornell, and the Dogge tree: though some of these also prosper wel enough in the plaine. The Fyre, the Oke, the Chestnutte, the Fyrebeeche, the Mastholme, and the Cornell, growe aswell in the Valley, as on the Mountaine: vpon the plaines you shall haue the Tamarix, the Elme, the Poplar, the Willowe, the Hasell, the Walnutte, the Hornebeame, the Maple, the Ashe, and the Beeche. You shall not lightly see the Plome tree, the Apple, the wilde Oliue, nor the Walnutte, vppon the Mountaine, all such as grow as well in the plaine, as vpon the mountaine, are larger and fayrer to the eye growing in the playne, but are better for Tymber, and fruite, vppon the Mountaine, except the Peare and the Apple, (as *Theophrastus* saith:) In Marrishe grounde delighteth the Willowe, the Alder, the Poplar, and the Priuey. And although the most Woodes doe spring of their owne nature, and accorde, yet are they by planting, labour, and diligence, brought to be a great deale more fayre and fruitfull: for as afore I told you, how fruite Trees were nourished and brought vp in Impe Gardens, so are these wild and fruite-

lesse

leſſe trées, ſet and planted for tymber and fewell. He that is diſpoſed to plante a Wood, muſt firſt according to his Soyle, chooſe his ſets: and if he haue them not ſpringing of his owne, let him make an Impe Garden of the ſéedes, encloſing well the grounde with Hedge, Rampire, or Ditch, leaſt Sheepe, Goates, or any other cattell, come in to bite and brouſe it: for whatſoeuer they haue once bitten (as it were infected with a deadly poiſon) periſheth: and therefore thoſe that meane to plant Woods, eyther for tymber, fewell, or maſt, muſt carefully prouide againſt theſe hurtfull enemies. The Countrey lawes haue therein well prouided, that where ſuch Springes are, they ſhall féede no Goates, nor ſuch Cattell. Amongſt the Maſt trées, and ſuch as ſerue for tymber, the firſt place of right belongeth to the Oke, called in Gréeke Δρυς, in Latine *Quercus*, in Italian *Quercia*, in Spaniſhe *Roble*, in French *Cheſny*, in Dutch *Eichenbaum*, he that will then plant an Oke Groue, muſt prouide him of ripe Acornes, not ouer dried, nor faultie, or any waye corrupted: theſe muſt he ſowe in good ground, well tilled, with as great carefulneſſe as he plants his Orcharde, and well encloſe it, that there come no Cattell in it: which (when they be ſomething growen) you muſt about Februarie remoue to the place where you entende to plant your Wood: if you cut and proine them, it is thought they will proſper the better for Maſt: but if you reſerue them for tymber, you muſt not touch the toppes, that it may run vp the ſtraighter, and higher. In remouing them, you muſt make your trenches a foote and a halfe déepe, couering the Rootes well wyth earth, taking good héede you neither bruſe them, nor breake them: for better you were to cut them. The Oke agréeth well enough with all maner of ground, but proſpereth the better in Marſhes, and watry places: it groweth almoſt in all grounds, yea euen in grauell and ſande, except it be ouer dry: it liketh worſt a fatte ground, neither refuſeth it the mountaine. We haue at this day an Oke in *Weſtphalia*, not farre from the Caſtle of *Altenan*, which is from the foote to the néereſt bowe, one hundred and thirtie foote, and thrée elles in thickneſſe: and an other in an other place, that being cutte out, made a

The Oke.

hundred

hundred Waine loade: not farre from this place, there grew an other Oke of tenne yardes in thicknesse, but not very hie: the Rouers in Germany, were wont to vſe for their Ships, hollowed trees, whereof some one (as *Plinie* saith) woulde carry thirtie men. The nert amongſt the maſt trees is the Beech, in Greeke φηγὸς, in Latine *Fagus*, in Italian *Faggio*, in Spaniſh *Haya*, in French *Faus*, in Dutch *Buchen*, planted almoſt after the ſame manner that the Okes bee. The Maſtholme in Greeke πρῖνος, in Latine *Ilex*, in Italian where it is better knowen *Elice*, in Spaniſhe *Enzina*, in French *Hauſſen*: it groweth hie, if it haue a grounde meete for it: it proſpereth vppon hilles, and likes not the plaine: it beareth Acornes leſſer then the Acornes of the Oke, a leafe like a Baye, and is continually greene. The like hath the Corke tree, in Greeke πτελέα, in Latine *Suber*, in Spaniſhe *Alcornoque*, in French *Liege*, which is counted amongſt thoſe that beare maſte, the barke whereof wee occupie, for the flotes of our fiſhing nettes, and in Pantofels for winter: all other trees (ſauing onely the Corke) if you ſpoile them of their barke doe die. An other Maſt bearing Oke there is, called in Greeke ἔλατος, in Latine *Quercus ſilueſtrum*, in Frenche *Cheſne*, a kinde whereof ſome thinke the Cerre tree to be, called in Latine *Cerrus*, growing in wilde and barrain places. There are ſome that do number the Cheſtnutte tree amongſt the maſt bearers: but of this I haue ſpoken before. The beſt Maſt is the Oke Maſt, the nert the Beech and the Cheſtnutte, then the wilde Oke, &c. all verie good and meete for the fatting of Cattell, ſpecially Hoggs. The Oke Maſte, or Acorne, maketh thicke Bacon, ſounde fleſh, and long laſting, if it be well ſalted and dried: on the other ſide, Cheſtnuttes and Beech Maſt, make ſweete and delicate fleſh, light of digeſtion, but not ſo long laſting. The nert is the Cerre tree, that maketh very ſound and good fleſh: the maſthome maketh pleaſant Bacon, faire, and weightie: *Plinie* ſaith, that it was ordayned by the law of the twelue Tables, that it ſhoulde be lawfull for any man to gather his owne Maſt, falling vpon the ground of his neighbour, which the Edict of the cheefe Juſtice doth thus interprete: that it ſhall be lawfull

Beech-wood.

Maſt, and his differences.

lawfull for him to doe three daies togeather, with this prouiso, that he shall onely geather the Acornes, and do no harme to his neighbour, as *Vlpianus* witnesseth. *Glans* Mast (as *Cuius* saith) is taken for the fruite of all trees, as ἄκρόδρυα signifieth with the Greeke, though properly ἄκρόδρυα, be those fruites that are shelde, as nuts, and such other. Vppon these Maste bearers there groweth also the Gall, in Greeke κηκὶς, in French *Noix, de Galle*, in Italian and Dutch, as in Latine in Spanishe *Agalla*, a little ball, rugged and vneuen without, wherof some be massie, some hollow, some blacke, some white, some bigge, some lesser. It groweth (as *Plinie* saith) the Sunne rising in *Gemini*, comming all out suddenly in one night: in one day it waxeth white, and if the heate of the Sunne then take it, it withereth: the blacke continueth the longer, and groweth sometime to the bignesse of an Apple: these serueth best to curry withall, and the other to finish the Leather, the worst is of the Oke: and thus of such trees as beare Mast. Now will I come with all the principallest of the other trees, to make vp your Woodes, amongst which are the Elme, and the Willowe: the Elme in Greeke πτελέα, in Latine *Vlmus*, in Italian and Spanish *Olmo*, in French *Orme*, in Dutch *Vlmbaum*, and *Yffenholtz*: the planting whereof, because it is to great vse, and easily growes, we may not let passe: first, because it groweth well with the Vine, and ministreth good fode to Cattle: secondly (as it is all hart) it maketh good tymber. *Theophrastus* and *Plinie*, doe both affirme the Elme to be barraine, peraduenture because the seede at the first comming of the leafe, seemeth to lie hid among the leaues, and therefore it is thought to be some of the leafe (as *Columella* affirmeth.) He that will plante a Groue of Elmes, must gather the seede called *Samara*, about the beginning of March, when it beginneth to ware yellow, and after that it hath dried in the shadowe two daies, sowe it very thicke, and cast fine sifted mould vpon it, and if there come not good store of Raine, water it well: after a yeere you may remoue it to your Elme Groue, setting them certaine foote a sunder, and to the end that they rote not to deepe, but may be taken vp againe, there must be betwixt them certaine little trenches, a foote and a

The Elme.

halfe

halfe distance: and on the rote you must knitte a knotte, or if they be very long, twist them like a Garlande, and being well nointed with Bullockes doung, set them, and tread in the earth round about them. The female Elmes are better to be planted in *Autumne*, because they haue no sede: at this day in many places, cutting of settes from the fairest Elmes, they set them in trenches, from whence when they are a little growen, they gether like settes, and by this dealing make a great gaine of them: in the like sort are planted Groues of Ashes. The Ashe in Greeke μελία, in Italian *Fraxino*, in Spanish *Fresno*, in French *Fraisne*, in Duth *Eschen*: the Ashe delighteth in rich and moiste ground, and in plaine Countries, though it growe well enough also in drie groundes, he spreadeth out his Rotes very farre, and therefore is not to be sette about Corne ground, it may be felled euery thirde or fourth yeere, for to make staues for Vines. The Ashe groweth very fast, and such as are forwardes are set in Februarie, with such young plantes as come of them, in good handsome order standing arowe: others set such Ashes as they meane shall make supporters for Garden Vines, in trenches of a yeere olde, about the Calendes of March: and before the thirty sirth moneth they touch them not with any knife, for the preseruing of the Branches: after euery other yeere it is proyned, and in the sirt yeere ioyned with the Vine: if you vse to cuttte away the branches, they will growe to a very goodly height, with a rounde body, smothe, plaine, and strong: *Plinie* writeth of experience, that the Serpent doth so abhorre the Ashe, that if you enclose fire and him with the branches, he will rather runne into the fire, then goe through the bowes. Byrch, called in Greeke σημύδα, in Latine *Betula*, as *Theophrastus* writeth in his fourth booke, is a tree very meete for Woodes: it prospereth in coulde countries frostie, snowie and grauelly and in any barraine ground, wherefore they vse in barraine groundes, that serue for no other purpose, to plant Byrches: it is called in Italian *Bedolla*, in Dutch *Byrken*, in French *Beula*, Pine Woods, Fyrre Woods, Pytch tree, and Larsh, are common in Italy about Trent. The Pine tree in Greek πίτυς or πεύκη in Latine *Pinus*, in Italian and Spanish *Pino*, in Dutch *Hartzbaum*,

Ash groues.

The Pine

baum, is planted of his kernels, from October to Januarie: in hotte and drye Countryes, and in colde and wet places, in Februarie or March: the kernelles must bee gathered in June, before the clegges do open, and where you list to sowe them, either vpon hilles or elsewhere: you must first plowe the ground and cast in your sæde, as yée doe in sowing of Corne, and couer them gently with a light Harrow or a rake, not couering them aboue a hand broade: you shall doe well, if you lay the kernels in water three daies before. The kernelles of the Pine are called in Græke Στρόυλος, and κονος, in Spanish *Pinones*. The Firre trée in Græke Ελάτη, in Latine *Abies*, in Italian *Abete*, in Spanish *Abeto*, in Dutch *Deamen*, loueth not to haue any great adoo made about it: if you be too curious in planting of it, it will growe (as they say) the worse, it growes of his owne kernell in wilde mountaines, plaines, or any where. The Pitchtrée in Græke πίτυς, in Latine *Picea*, in Italian *Pezzo*, in Spanish *El pino de que se baza lapez*, in Dutch *Rododemem*, is a trée of the kind of Pines, and very like to the Pine, sweating out his Rozen as he doth: for there are fiue kinds of these Rozen trées, the Pine, the Pitch trée, the wilde Pine, the Firre, the Larsh, and the Tarre trée, the planting of them al is alike. The Alder, a trée also mæte for woods, in Græke κλήθρα, in Latine *Alnus*, in Italian *Anno*, in Dutch *Elsen*, in French *Aulne*, in groweth in plaine and marish places neare to Riuers. *Theophrastus* saith, it yéldeth a fruitful sæde in the ende of Sommer: many places are commodiously planted with Poplar, whereof there are two sortes the white called in Græke λεύκα, and the blacke Αἴγειρος: the white is called with the Italians *Populo bianco*, with the Spaniardes *Alamo blanco*, the blacke of the Italians, *Populo negro*, of the other *Amalo negrillo*, in French *Peuplier*, in Dutch *Peppelem*, it is planted of the branches and settes, and delighteth in watry places, or any other grounde it prowcth very fast: the blacke hath the ruggedder bark, his leaues round while hée is yong, and cornered in his age, white vnderneath, and gréene aboue. The timber hereof is good for buildinges, specially within doores: his Wood is whitishe within, and the rinde blackish, whence he hath his name. *Theophrastus* addeth a thirde

Fyr tree.

The Pitchtree

The Alder.

Poplar, white and blacke.

kinde

kinde called in Greeke κρανία, which some call the Poplar of *Libya*, and of the *Alpes*, it hath a rugged barke like the wilde Perry, a leafe like Iuy, and is in colour like a darke greene, sharpe at the one end, and broade at the other. The blacke Poplar groweth in great plentie about the lower partes of the Rhyne, though *Homer* call the Willowe a fruiteleſſe tree, because his fruite turneth into cobwebs before they be ripe: yet is the soueraintie giuen him amongſt Woodes that are vsually felde. *Cato* giueth the thirde place of husbandry groundes to the Willowe, preferring it either before the Olyue Groue, Corne ground, or Meddow, for it is oftner to be cut, and groweth the thicker, neither is there so great gaine with so little charge in any thinge: it delighteth in watry grounds, dark and shadowy, and therefore is planted about Riuers and Lakes, howbeit it groweth in Champion, and other grounde: it is planted of yong settes, a foote and a halfe long, and well couered with earth: a wette ground requireth a greater distance betwirt them, wherein you shall doe well to set them fiue foot a sunder, in order like the Sinke vpon a Die: in the dry ground they may be sette thicker together, yet *Columella* woulde haue them fiue foote distaunce for passing by them. There are two sortes of Wyllowes, one sort enduring for euer, called Osier, seruing for making of Baskets, Chaires, Hampers, and other countrye stuffe: the other kinde growing with great and high branches, seruing for staies to Vines, or for quicksettes, or stakes of Hedges, and is called stake Wyllowe: it is planted both of the twigge and of the stalke, but the stalke is the better, which must be set in a moiste ground well digged, two foote and a halfe in the ground before it spring, and when the twygges are bare, you must take them from the tree when they be very drye, otherwise they prosper not so well: these stakes or settes being taken from the yong stocke, that hath been once or twise cut, and in thickneſſe as much as a mans arme, you must set in the grounde three foote, or a foote and a halfe deepe, and fiue foote a sunder, laying good moulde about them, fence them well, that there come no cattell to pill off the barke of them. After three or foure yeeres you may pull them, whereby they will growe,

Wyllows.

Osyar.

growe and spread the better, and so you may continually cut them euery fiue, or sowerth yeare, whereof you may make setts for planting of more, for the old ones are not so good to be occupied. The time of cutting of them, is from the fall of the leafe vntill Aprill, the Mone encreasing, and in Westerly, or Southerly windes: for if you doe it, the winde being in the North, we finde by experience they will not growe so well: you must cutte them cleane awaye, that the olde branches hurte not the yong springes: some thinke the yong Willowe to growe the better the nearer the grounde, and the smother he is cut. The Osiar commonly groweth of his owne selfe, and is also planted of his roddes, in waterie and marishe groundes, the earth raised vppe, and laied in furrowes: it is planted and springes most plentifully, where the earth is beaten vppe with the rage and ouerflowings of the water: it serueth as a sure defence for making of Bankes and Walles in Marshes, and that chiefely in March, the Mone encreasing: the Osiar may be cutte euerie yeare, or euery two yeare if you will. Lo, here haue you concerning Woodes what needefullest are for our Countriemen to plant: for as for Woods of Cedar, Cipresse, and other strange trees, it is not for our Husbands to busie themselues about: wette and riche groundes that are meete for Corne, is also good to bee planted with Okes, Beeche, Willowe, and Poplar, although the Oke and the Beeche refuse hillie, and lighter ground: Sandy, and barraine groundes, are good for Birche, Bramble, Broome, and Heath, as I haue sufficiently saide before. Now perhappes you would haue me proceede with Coppisse Woodes, that are continually to be feld.

For planting of Osiers.

THRA. I would, if it were no paine to you.

MARIVS. Coppisse, or sale Wood, were first brought vp (as *Plinie* saieth) by *Qu. Martius*. This kinde of Woode groweth commonly of his owne accorde in forestes, and watrie places: but all Woodes are not for this purpose, for some trees there are, which if you cutte and poule often, will fade and die, as the Ashe, the Iuniper, the Cherie, the Firre, the Apple, and the Pirrie: and some againe if they be not cut, wil perish: the Vine requireth yeerely cutting, the Oliue, the Mir-

tell, and the Pomegranate, eche other yeere. In cutting of them (as they are diuers) ſo is their order: for the Oke, as he groweth ſlowlie, ſo is he not to be cut, before he be of ſeuen, or eight yeres grouth: and the nearer the grounde you cut him, the better he growes, though he may be polled ſeuen or eight foote aboue the ground: The like is of the Beech, ſauing that he may ſoner bee cut. The greate Willow, and the Poplar, are cut after one ſort, as I ſhewed a little before: though the Oſier may be cut euery two yeere, or euery yeere. The cheſtnut may bee felde euery ſeuenth yeere, both for fewell, or for Vine ſtaues, trees are cutte and polde ſundrie waies, for either they are felde cloſe by the grounde, or the bodie is polde, when it comes to be of the bignes of a mannes arme, or more, as the Willowe is. Coppiſled Woodes are commonly ſeuered into ſo many parcels, as may ſerue for yeerely felling, ſome ſtill growing while others are a felling, and becauſe ſome of them grow faſter then other ſome, euery ſort hath his place, and his ſeaſon appointed. Some are felled euery fourth yeere, ſome euery fifth yeere, as the Willowe, the Poplar, the Alder, and the Birch: ſome, once in ſeauen yeere, as the cheſtnut, and ſome in more, as the Oke. It remaineth, that I nowe ſhewe you the manner of felling of timber, and what tymber is meeteſt for euery worke.

THRA. I haue a great deſire to heare what time is meeteſt for felling of timber, which much auaileth (as they ſay) to the long enduring of it: after, I would know what timber is meete for euery purpoſe.

MARIVS. The ſeaſon of felling, no doubt is to great purpoſe, whether it bee for timber or fewell: for ſuch trees as are felde either in the Spring, or in Sommer, though they ſeeme dry without, are notwithſtanding full of moiſture, and wetteneſſe within, which in burning, will neuer make good fire: and therefore for Coppiſſe and fire Wood, your beſt felling is in Winter: and for building, it is beſt cutting of your trees in December, and Januarie, the Moone being in the wane, from the twentie, to the thirtie day. Yet are there ſome that ſaie, they haue founde by experience, that trees being cut in Januarie, are full of Sappe: and therefore thinke it better

ter either to cut them before, or after. *Cato* saith, the best time is about the twelfth of December, for the Timber Tree that beareth fruite, is best in season when his seede is ripe, and that which hath no seede, when it pilles it is time to cutte. Such as are slawed, seruing for Pillers of Churches, or other round workes, must be cutte when they spring: Shingles, and such as the Hatchet must slawe, are to be cutte betwixte midde Winter, and the beginning of the Westerne Windes. *Plinie* affirmeth the best season for felling of timber, to be while the Mone is in coniunction with the Sunne. *Vitruuius* an excellent fellowe in building, doth will you to fell your timber from the beginning of *Autumne*, till the time that the westerne windes begin to blowe, the which windes begin to blow (as *Plinie* saith) about the first Ides of Februarie: for in the Spring, all Trees are as it were with child, and bend all their force to the putting out of their leafe, and their fruite. Since then they be Sappie, and not sounde, by the necessitie of the season, they are made by the reason of their lowenesse feeble, and of no force: euen as the bodies of women, after they haue conceiued, from their conception, till the time of their deliuerance, are not iudged to be sound, or perfite. In like sort the Trees in *Autumne*, when the fruit and leaues begin to fall, the Rootes drawing from the earth their sufficient sustenance, are restored againe to their old estate: beside, the force of the aire in Winter doth fasten and make sounde the Trees, and therefore is it then thought the best time to fell your timber. The maner of cutting of it is this, first to cut it till you come to the middle of the pithe, and so to let it stand, that the Sappe that is in it, may descende and droppe out: so shall not the moisture within putrifie, nor corrupt the timber, but passe clearly away. When you haue cutte it, and you see it dry that it hath left dropping, you may cutte it downe, and so shall you be sure it shall best serue your turne. There are some maisters in building, that thinke it best after you haue sawen out your timber in bordes, to lay them in water for three or fowre daies, or if they be of Beech, for a longer time, eight or nine daies: and being ordred in this wise they shall neither (they say) be rotten, or wormc eaten.

THRA. Now let vs heare what trées are beſt for timber.

MARIVS. There are diuers and ſundrie vſes of timber: ſuch as are barraine, are better then the fruitfull, excepting thoſe ſortes where the male beareth, as the Cipreſſe, and the Cornell: in all trées the partes that grow toward the North, are harder, and ſounder, which are almoſt couered with moſſe, as with a cloke againſt the cold: the worſt are thoſe that growe in ſhadowie and watriſhe places, the maſſier and better during are they that growe againſt the Sunne: And therefore *Theophraſtus* deuideth all timber into three ſortes, into clouen, ſquared, and round, of which the clouen do neuer rent nor coame: for the pithe being bared, drieth vp and dieth: they alſo endure long, becauſe they haue little moiſture. The ſquared, and the round, or the whole timber, doth coame and gape, ſpecially the round, becauſe it is fuller of pithe, and therefore renteth and coameth in euery place. And ſuch hie Trées as they vſe for pillers, and maine poſtes, they firſt rubbe ouer with Bullockes doung to ſeaſon them, and to ſucke out the ſappe: for the moiſture doe alwaies come ſoner then the drie, and drie better to be ſawed then the grœne, except the Oke, and the Bore, that doe more fill the teeth of the Sawe, and reſiſt it. Some againe refuſe to be glued either with them ſelues, or any other, as the Oke, which cleaueth as ſone to a ſtone, as any Wood, neither doe they well cleaue, but to ſuch as are of like Nature: to be bored, the grœne is worſer then the drie: the light and the drie, are harder to be cut: for bandes and Withes, the Willow, the Broome, the Birche, the Elme, the Poplar, the Vine, the clouen Rœde, & the Bramble are beſt: the Haſell will alſo ſerue but the firſt is the Willowe: they haue alſo a certain hardneſſe and faireneſſe, meete to be vſed in grauen workes. Among thoſe that ſerue for timber, are moſt in vſe the Firre, the Oke, the Pine, the Larch, the Eſcle, the Elme, Willowe, Cedar, Cypreſſe, the Bore, Birche, Planetrœ, Alder, Aſhe, wilde Oke, Datetrée, Bœche, wilde Oliue, Maſtholme, Wallnut, Maple, and Holly, and diuers others, vſed according to their nature, and the maner of the country where they grow. The Firretrœ whereof I haue alſo ſpoken before, gineth out Rozen, and his

timber

timber is mete for diuers workes, and greately estemed for his heighth and bigneſſe, whereof are made the Ship Maſtes, and Pillers for houſes: For it is verie ſtrong, and able to abide great force. It is vſed alſo in building, for greate Gates and dore poſtes: in fyne, good for any building within, but not ſo well enduring without dores, and very ſone ſette afire. They vſed (as *Theophraſtus* ſaieth) in the olde time to make their Gallies and long Boates of Firre, for the lightneſſe ſake, and their ſhippes for burden, of Pine tree, and Oke. Of Oke, I haue ſpoken a little before, the timber whereof is beſt, both for inwarde buildings, and for the weather, and alſo well enduring in the water: *Heſiodus* would haue yokes made of Oke. The wilde Oke ſerueth alſo well in water workes, ſo it be not neare the ſea: for there it endureth not, by reaſon of the ſaltneſſe: it will not be pearced with any Augur, except it be wette before: neither ſo will it ſuffer (as *Plinie* ſaieth) any Naile driuen in it, to be plucked out againe. The Maſtholme in Greeke πεῦκος, a tree well knowne in Italie, the Wood whereof is tough and ſtrong, and of colour like a darcke redde, mete (as *Heſiodus* ſaieth) to ſerue for Plow ſhares: it maie alſo be made in Wainſcot, and Paile borde. The Larſhe tree in Greeke λάριξ, in Italian *Larice*, in Dutche *Lerchenbaura*, was in the olde tyme greatly eſtemed about the riuer *Poe*, and the Gulfe of *Veniz*, not onely for the bitternelle of the Sappe, whereby (as *Vitruuius* ſaieth) it is free from corruption and wormes, but alſo for that it will take no fire, which *Mathiolus* ſeemeth with his argumentes to confute. It is good to ſuſtaine greate burdens, and ſtrong to reſiſt any violence of weather, howbeit they ſaie, it will rotte with ſalte water. The Eſcle is a kind of Oke, called in Greeke μελίφυλλος, in Latine *Eſculus*, is ſone hurte with any moiſture: the Elme, the Willowe, and the Poplar, whereof I haue ſpoken before, will verie ſone rot, and corrupt: they will ſerue well ynough within dore, and for making of Hedges. The Elme continueth very hard, and ſtrong, and therefore is mete for the cheekes and poſtes of Gates, and for Gates, for it will not bowe, nor warpe: but you muſt ſo diſpoſe it, that the toppe may ſtand downeward: It is mete (as

The Firre

The Maſt holme.

The Larſh.

Heſiodus ſaith) to make Plowe handles of. The Aſhe (as *Theophraſtus* ſaith) is of two ſortes, the one tale, ſtrong, white, and without knottes, the other more full of Sappe, ruggedder, and harder. The Bale leafe (as *Plinie* ſaith) is a poiſon to all kinde of Cattell: but herein he is deceiued, as it ſhould appeare by the likelineſſe of the name, μιλος or αμιλας is the yong Træ, whoſe leaues (as is certainly tried) killeth all ſuch beaſtes as chawe not the cudde. Aſhe beſides his manifolde vſe other waies, maketh the beſt and faireſt horſemennes ſtaues, whereof was made the ſtaffe of *Achilles*, which *Homer* ſo greatly commendeth: it is alſo cutte out in thinne bordes. The Beeche, whereof I haue ſpoken before, although it be brittle and tender, and may ſo bee cutte in thinne bordes and bent, as he ſeemeth to ſerue onely for Caſkettes, Bores, and Coffers, his colour being very faire, yet is he ſure and truſty in bearing of weight, as in Axeltrees for cartes, or waines. The barke of the Beeche, was vſed in the olde time, for veſſelles to gather Grapes in, and other fruite, and alſo for Cruettes, and veſſelles to doe ſacrifice withall: and therefore *Curius* ſware, that he brought nothing away of all the ſpoile of his enimies, but one poore Beechen Cruet, wherein he might ſacrifice to his gods. The Alder is a træ with a ſtreight bodie, a ſoft and reddiſh woode, growing commonly in the watry places, it is cheefely eſteemed for foundations, and in water workes, becauſe it neuer rotteth liyng in the water: and therefore it is greatly accounted of among the Venitians, for the foundations of their places, & houſes: for being driuen thicke in piles, it endureth for euer, and ſuſtaineth a wonderfull weight. The rinde is plucked off in the ſpring, and ſerueth the Diar in his occupation: it hath like knots to the Cedar, to be cut and wrought in. The Plane træ is but a ſtranger, and a newe come to Italie, brought thither onely for the commoditie of the ſhadow, keeping off the Sunne in Sommer, and letting it in, in Winter. There are ſome in *Athens* (as *Plinie* ſaith) whoſe branches are 36. cubites in breadth: in *Lycia* there is one for greatneſſe like a houſe, the ſhaddow place vnderneth containing 81. foote in bigneſſe: the timber with his ſofteneſſe hath his vſe but in water, as the Alder, but drier thē the Elme,

the

the Aſhe, the Mulberie, and the Cherie. The Linder, in Greeke φιλυρια, and ſo in Italian, in Spaniſh *Latera*, in Dutch *Lynden*: this Tree *Theophraſtus* counteth beſt for the workeman, by reaſon of his ſoftneſſe: it breedeth no wormes, and hath betwirt the Barke and the Wood, ſondrie little rindes, whereof they were wont in *Plinies* time to make Ropes and Withes. The Birch is very beautifull and faire: the inner rinde of the tree called in Latine *Liber*, was vſed in the old time in ſteade of Paper to write vpon, and was bounde vppe in volumes, whereof bookes had firſt the name of *Libri*, the twigs and bowes be ſmal and bending, vſed to be carried before the Magiſtrate among the Romanes, at this day terrible to poore boies in Schooles. The Elder tree called of *Dioſcorides* Ακτη, in Latine *Sambucus*, in Italian *Sembuco*, in Spaniſhe *Sauco*, in Frenche *Suſeau*, in Dutche *Hollenter*, doth of all other trees ſoneſt and eaſelieſt growe, as experience beſides *Theophraſtus* doth teach vs, and though it be very full of pith, yet the wood is ſtrong and good: it is hollowed to diuers vſes, and very light ſtaues are made of it. It is ſtrong and tough when it is dry, and being laid in water, the rinde commeth off as ſone as he is dry. The Elder wood is very harde and ſtrong, and cheefely vſed for Bare ſpeares, the roote (as *Plinie* ſaith) may be made in thin bordes. The Figge tree, is a tree very well knowen and fruitefull, not very hie, but somewhat thicke (as *Theophraſtus* ſaieth) a cubite in compaſſe, the tymber is ſtrong, and vſed for many purpoſes, and ſith it is ſoft, and holdeth faſt whatſoeuer ſtickes in it, it is greately vſed in targettes. Bore tree, in Greeke πυξος, in Italian *Boxo*, in Spaniſhe *Box*, in Frenche *Bouys*, in Dutch *Buſtbaum*, an excellent tree, and for his long laſting, to be preferred before others. The Bore that turned is, ſaith *Virgill*, Iunipe, called both of *Theophraſtus* and *Dioſcorides*; Αρκευθις, Iuniper. becauſe it driueth away vermine: for with his ſauor, toades and ſnales, and ſuch like are driuen away, in Latine it is called *Iuniperus*, in Italian *Ginipro*, in Spaniſhe *Enebro*, in Frenche *Geneure*, in Dutch *Wachoiter*: it is very like to Cedar, but that it is not ſo large, nor ſo hie: though in many places it groweth to a great height: the timber whereof well endureth a C. yeeres.

And therefore *Haniball* commaunded, that the temple of *Diana* ſhould be built with rafters and beames of Iuniper, to the end it might continue. It alſo kæpeth fire a long time, in ſo muche as it is ſaied, the coales of Iuniper kindled, haue kepte fire a yære together: The Gumme whereof our Painters vſe.

The Cedar. The Ceder Træ, in Græke κέδρος, in Latine *Cedrus*, and almoſt like in other tongues: the hardneſſe of this timber is onely praiſed, and that it will neither rotte, nor be wormme eaten, but continue euer. Salomon built that noble Temple of God at Hieruſalem of Cedar: It is very mæte for the building of Palaces and Caſtels: the Cedar, the Eben, and the Oliue træ, doe neuer chinke nor coame. Images of Goddes and Sainctes were alwaies made of Cedar, becauſe it euer yældeth a moiſture, as though it ſweat. *Theophraſtus* writeth of Cedars in *Syria*, of fower elles and more in compaſſe. The Rozen and Pitche of the Cedar træ, is called in Græke κέδρια.

The Cypreſſe. The Cypreſſe, and the Pine, do endure a long tyme without eyther wormme, or rotting: *Plinie* commendeth Gates of fower hundred yæres olde.

The Pine. The pine (ſaieth *Theophraſtus*) is of greate ſtrength, and very mæte for the ſtreightnes and handſomneſſe, to be emploied in building.

The Walnut tree. The Walnut træ is a great træ, and commonly knowne, whoſe timber is much vſed in ſælings and tables. *Theophraſtus* writeth, that the Walnutte træ before it falleth, maketh a certain kinde of noiſe, which it once happened in *Antandro*, the people bæyng greatlie afrayde, fledde ſodaunly out of the Bathes.

The wild Olyue. The wilde Oliue, in Græke ἀγρελαία, in Latine *Oleaſter*, in Italian *Olmo Saluatico*, in Spaniſhe *Azenuche*, in Frenche *Oliue ſauuage*, in Dutche *Wilder Olyboum*, of his Wood is made the haftes and handles of wimbles and Augures.

The Holly. Holme, or Holly, is a træ whoſe leaues are full of prickles round about the leafe, and the barke, bæing both continually græne, the berries like the Cedar: of the rind of the rootes they make Birdlime: the Wood is very harde, the braunches will well winde and bowe, and therefore ſerueth excellent well for quickſet hedges: the Dutchmen call it *Hulſen*.

The Maple. The Maple, called *Theophraſtus* σφένδαμνος, in Dutche *Maſſelterbaum*, for the beautie of the wood is next to the Cedar, hauing

uing a very faire and pleasant graine, of the resemblance called Peacockes tayle: with this wood, tables are couered most gorgeous to the eies, and other fine workes made, specially of the knobbes or wennes that growe out of it, called *Bruscon* and *Molluscon*: of which the knobbes hath the fairer and the more courled graine. *Molluscon* is a more open graine, and if so be it were of sufficient breadth for tables, it were to be preferred before the Cedar: now it is but seldome seene, and that in writing tables, or aboute beddes. There is also a knobbe, or a wen growing vpon the Alder, but a great deale worse then that of the Maple. The Date trée, whereof we haue spoken before, hath a very softe wood. The Corke hys timber is tough: but now for a farewell, I will shew you what workes euerie timber is méete for. The Firre, the Pine, and the Cedar, serue for Shippes for Galleis, and Lighters, (as *Theophrastus* saith) are made of Firre, for the lightnesse sake: Shippes of burden, are made of Pine. Vpon the Frenche and Germanie seas, they chéefly vse Oke about their Shippes: the selfe-same timber also serueth well for building of houses, specially the Cedar, and the Cipresse. The Firre, the Poplar, the Ash, & the Elme, are méete for the inner partes of the house, but they serue not so wel in the weather, as the Oke doeth. For conueighances of water, the Alder, the Pine, and the Pitche trée, are best made in Pipes: being well couered in the earth, they last a wonderfull while, but if they lye vncouered, they soner perish: The Oke also, the Béeche, and the Walnutte, endure very well in the water. The Timber that longest endureth, is the Oliue, the Oke, the wilde Oke, and the Hastholme: For as *Plinie* witnesseth, the Oliue hath béene séene to stand two hundred yéeres, and like the Cedar, and the Cypresse, as hath béen saied before: for Rafters and Portisse péeces, the Elme and the Ashe, by reason of theyr length serues best. The best to beare weight, is the Fyrre, and the Larshe, which how so euer you laie them, will neither bend, nor breake, and neuer faile, till wormes consume them. Contrariwise, the Oliue Trée, and the Oke, will giue and bende, and so will the Poplar, the Willow, the Elme, and the Birche. The Date (a worthie Trée) bendeth vp against his burden

The Date tree
The Corke.
What turne each timber serues
For ships.
For houses.
For water courses.
For bearing of weight.

burden. The Poplar on the other side, giueth at euery light thing. The Elme, and the Ashe, though slowly are easely bent. These also are easely wound & bent: the Willowe, the Birch, the Broome, the Oke, and the Oken bordes. Shyngles, to couer houses withall, are best made of Oke, Beech, and such others as beare Maste: and also of such as yelde Rozen, as the Pine, and the Pitch tree: the Pitch tree, and the Oke, serue best for Cuppes, Tankardes, and such like. Those that are cutte for Wainscot and thin bordes, the Cerre tree, the Terebinth, the Maple, the Bore, the Date, the Mastholme, the rote of the Elder, and the Popler. For the beautifyng of Tables, serueth chefely the Maple, the Ashe, the Walnutte, and sometimes the Tyerie, and the Peare: but the preciousest are the Cypresse, and the Cedar Tables. For Arletrees, Wheles, and Spoakes, serueth the Oke, the Maple, and the Beeche. *Virgill* doth also appoint the Cedar, and the Cipresse to this vse. Hereof they make the Spoakes of Wheles, and hereof Carts and Waines. The selfesame Timber also serueth (as *Hesiodus* saith) for Plowes, Pokes, and Wagons: but that he addeth hereunto the Ashe, and the Cerre tree, and as the Ashe for his softnesse, so the Mastholme for his hardnesse. For Pullies, Wimbles, Sheathes, and Mallettes, the meetest are the wilde Oliue, the Bore, the Mastholme, the Medlar, the Elme, the Ashe, the Maple, and the Bramble: but the greater sort of Mallettes, or Beetles, and the Wheles, and Pullies for Mils, and Welles, are made of Pine, and Walnutte tree. *Cato* woulde haue the Waines and Cartes made of Holly, Baye, and Elme. *Hyginus* would haue the handles, or steles of Husbandmennes toles, made of Dogge tree woode, Holme, Cerre tree, and (which we haue commonly in vse) Bore. Targettes (as *Theophrastus* saith) made of Willowe, and Vine, for being pearced, they close the harder togither: but the Willowe is the lightest, and therefore the better. The Figge tree also, and the Lindre, the Birch, the Poplar, and the Elder, serue as well for Targettes. The best woode for Horsemens staues is the Ashe, & (as *Virgill* saith) for valiant staues, the Myrtil: the Ewe tree serueth (as the same *Virgil* witnesseth) for Bowes.

For shingles.

For Tables.

For Axeltrees, Yokes, & Plowes.

For hafts, and handels.

For Targets.

For chasing staues.

The

The Ewe Tree for the Persian bowe they bend.

For Gates, they vse the Elme: for Hampers, or Basketes, all such as easily bend. For Cupplinges and Rafters of houses, the Elme: and the Ashe for thinne worde, the best to cleaue the Firre, the Poplar, and the Beeche: for long during, and abiding the weather, and standing in water, the Oke is commended, for which the other serue not, saue for the water, the Beeche, and the Alder: for fire, and light, are vsed the Firre, the Pitch tree, and the Pine. The best coles are made of the fastest wood, as the Oke, and the wilde Oke: but the finers rather desier the coles that are made of the Pine tree, because they better abide the blowing, and die not so fast as the other. The Cerre tree, though the timber be of no great vse, yet serueth it well to make cole of for the Brasse Forges, because as sone as the Bellowes leaue, the fire ceaseth, and there is little waste in it: but for building, the timber thereof is altogether vnprofitable, because it doth easily breake, and moulder away: but being in postes vnhewed, it serueth well enough within doore. The aptest to take fire, is the Figge tree, and the Oliue tree: The Figge tree, because it is soft and open: the Oliue tree, for the fastnesse and the fatnesse. The Larshe tree (as *Vitruuius* saith) resisteth the fire, though *Mathiolus* (as I saied before) goeth about to disproue it. In all the bodies of trees, as of liuely creatures, there is skinne, senewes, blood, flesh, vaines, bones, and marowe: their skinne is their barke, of great vse among countrie people: the vesselles that they gather there Wines and other frutes in, they make of the barke of Linde tree, Firre, Willowe, Beeche, and Alder. The Corke hath the thickeste barke, which though he lose, he dieth not, for so beneficiall hath nature bene to him, that because he is commonly spoiled of his barke, she hath giuen him two barkes. Of his barke, are made Pantoffels, and Slippers, and Floates for fishing nettes, and Angles: if the barke be pulled off, the wood sinkes, but the barke alwaies swimmeth. The next to the rinde in most trees, is the fat, the softest and the worst part of the tree, and most subiect to wormes: therefore it is commonly cutte awaie. The sappe of the tree, is the blood, which is not alike in all trees, for in the

For water woorkes.

For coling.

The bark.

Figge

Figge tree it is milkie, whiche serueth as a Rennette for Cheese. In Cherie trees, it is gummie: in Elmes, saltishe: in Apple trees, clammie and fatte: in Vines, and Peare trees, watrish: they commonly spring the best, whose Sappe is clammiest. The iuice of the Mulberie, is sought for (as *Plinie* saith) of the Phisitions. Nexte to the fatte, is the flesshe, and nexte to that, the bone, the best parte of the timber: all trees haue not any greate quantitie of this fatte and flesshe, for the Bore, the Cornell, and the Oliue, haue neither fatte, nor flesh, nor marrowe, and very little blood: as neither the Seruisse, and Alder, haue any bone, but both of them full of marrowe. Reedes for the most parte haue no flesshe at all: in flesh of trees, there are both vaines and arteries, the vaines are broder, and fairer: the arteries are onely in such trees as will cleaue, by meanes of which arteries it commeth to passe, that the one ende of a long beame laied to your eare, if you do but fillip with your finger vpon the other end, the sounde is brought forthwith to your eare, whereby it is knowne, whether the peece be straight and euen or not. In some trees there are knottes on the outside, as the wenne, or the kernell in the flesh of man, in the which there is neither veine, nor arterie, a hard knoppe of flesh being clong, and rolled vp in it selfe: these are most of price in the Ceder, and the Maple. In some, the flesh is quite without veines, hauing only certaine small stringes, and suche are thought to cleaue best: others, that haue not their strings, or arteries, will rather breake then cleaue: as the Vine, and the Oliue, will rather breake then cleaue. The whole bodie of the Figge is flesshie: as the bodie of the Mastholme, the Cornell, the wilde Oke, the Mulberie, and suche others as haue no pith, is all bonie. The graine that runneth ouerthwart in the Beeche, was taken (as *Plinie* sayeth) in the olde time for his arteries.

THRA. There are other commodities beside the timber to be gathered of these trees.

MARIVS. Verie true: (For as I saied before) of the Medlar, the Oke, the Chestnut, the Pine, and the Beech, these trees that growe in the woodes, besides their timber, beare fruite also, good and meete to be eaten. So of the Firres, the

Pitche

Pitche trees, and the Pines, wee gather Rozen and Pitch, to our greate commoditie and gaine: as of the Oke, the Beeche, the Chestnut, the Medlar, and the Pine, we haue fruite both meete for man, and also good for feeding of Hogges, and other cattell. In time of dearth, both our forefathers, and we, haue tried the good seruice, that Acornes in breade hath done, yea, as *Plinie* and others haue written, they were wont to bee serued in amongst fruite at riennes tables. Neyther is it vnknowen what great gaines some countries get by Acornes, Rozen, and Pitche: The Gall also groweth vppon these Acorne bearing trees, whereof I haue spoken before. Amongst all the trees out of which runneth Rozen, the Larre tree, a kinde of Pine, is fullest of Sappe, and softer then the Pitche, both meete for fire, and light, whose bordes wee vse to burne in steade of candels. The Cedar sweateth out Rozen and Pitche, called *Cedria*. Moreouer, of trees, is Birdelime made, the best of the Cerre tree, the Mastholme, and the Chestnutte, specially in the Woodes about *Sene*, and neere the Sea side, where they are carefully planted in great plentie, by the Birdlime makers: For they gather the berries from the trees, and boile them, till they breake, and after they haue stamped them, they washe them in Water, till all the flesh fall away. *Plinie* affirmeth, that it groweth onely vppon Okes, Mastholme, Skaddes, Pine trees, and Firre. Birdelime is also made of the rootes of certaine Trees, specially of the Holly, whose rootes and barkes withall they gather, and lay them vp in Trenches, couered with leaues in a very moiste ground (some doe it till young) and there they let them lie till they rotte, then take they them out and beate them, til they ware clammie, and after washe them in warme water, and make them vp in balles with their handes, it is vsed (beside other purposes) for the taking of Birdes. Besides all this, there sweateth out of Trees a certaine Gumme knowen to all men, as of the Cherie tree, the Plome Tree, the Iuniper, the Oliue, the Blackethorne, the Iuie, and Almond. Out of the Iuniper, commeth Vernish. Vernish: out of the Mirrhe, Storar: out of the white Poplar, Amber. *Plinie* writeth that Amber commeth out of certaine Amber.

Birdlime.

Pine

Pine Trées in the fatte, as Gumme doth from the Cherie trée. And thus these thinges I that haue héere at your requeſt declared, touching the order of Planting and Sowing, I beſéech you take in good worth: you heare my wife calleth vs to Supper, and you ſée the ſhadowe is ten foote long, therefore it is hie time we go.

THRA. I giue you moſt hartie thankes, that you haue thus frendly entertained me in this your faire Orchard, with the ſweéte deſcription of theſe pleaſant Hearbes and Trées.

IVLIA. Sir, your Supper is ready, I pray you make an ende of your talke, and let the Gentleman come in here into this Arber.

MARIVS. Come, let vs go.

Soli Deo laus & gloria, per Chriſtum Ieſum.

The ende of the ſecond Booke.

breeding, and curing of cattell.

Hipoconnus, Eupherbus, Hedio, Eumæus.

That the breeding and feeding of cattell is a part of husbandry, and neere ioined in kinrede to the tilture of the ground, not onely appeareth by *Virgil*, the prince of Poetes, who hath in his Georgickes throughlie set forth the order therof, but also by the witnesse of the more ancient Philosophers *Xenophon*, and *Aristotle*. The like doth our common experience at home daily teach vs: for albeit the trade of tillage and keeping of cattel is diuers, and the manner of occupying many times contrary the one to the other: as where the Grasier and Breeder, requireth a grounde ful of grasse and pasture, the husbandman on the other side, a ground without grasse, & wel tilled: yet in these their diuers desires, there appeereth a certain fellowship and mutuall commodity redounding in their occupying of one the other, which *Fundanius* in *Varro* doth seem by an apt comparison to proue: as in a couple of shalmes, or recorders, saith he, the one differeth in sound from the other, though the musick and song be al one (the one sounding the treble, the other the base) in like manner may we terme the grasiers trade the treble & the tillers occupation the base, following *Dicæarchus*, who reporteth, that at the beginning, men liued onely by breeding & feeding of cattel, not hauing as yet the skill of plowing & tilling the ground, nor plating of trees. Afterwards in a lower degree, was found out the maner of tilling of the groũd, & therfore beareth the base to the feeder, in that it is lower, as in a couple of recorders the base to the treble. So this vsing to keep cattel for plowing, cariage, dounging of our ground & other commodities, & on the other side, to til the ground for feeding and maintenance of our cattell, it comes to passe, that though the manner of occupiyng in tillage, & keeping of cattel be diuers, yet one of thẽ so serueth the turne of ỹ other, that (as it seemeth) they cannot well be a sonder: for without

the

the seruice of Horse and Oxen, we can neither plow nor doung our ground: and chaffe, strawe, and other offall of Corne, is meeter to be spent vppon the ground, then to be solde, both for the farmers behoofe, and the lords, and better bestowed vpon the housholde cattell, then vppon the forreiners. Besides, the doung of the cattell enricheth the grounde, and bringeth great encrease: and whereas there is no place (as *Columella* saith) but in the tillage of the ground, they haue as much neede of cattell, as men: the cattell serue not onely for the tilling of the ground, but also to bring in corne, to beare burdens, carrie doung for the grounde, and also for breede, and encrease of the Stocke: whereby they haue their name *Iumenta*, of helping, because they helpe and further vs, either in our labours by plowyng, or bearing. Neither is it onely sufficient to nourish, and bring vp this kinde of great cattell called *Iumenta*, but also the other lesser sorte of Beastes, as Sheepe, Swine, Goates: and of foules, Geese, Peacockes, Duckes, Pigions, Hennes, Chickins, and other Poultrie, and thinges belonging to husbandry, wherewith the good husbande, beside his owne sustenance maketh great gaine: and if the grounde be for it, and Pales fauourable, there ariseth oftentimes as great profite, as in sowing of corne, and that with smaller charges. For a proofe that feeding is gainefull, the wordes *pecunia* money, and *peculium* substance, or riches, being both deriued from the Latine name of cattels, may very wel serue: for in the old time they vsed their cattell in steade of money, and their common penalties and fines, taken in cattell, the greatest, was thirtie Oxen, and two Sheepe, euery Oxe valued at v. s. vj. d. and euery Sheepe at vj. d. the smallest was a sheepe: the very like is yet obserued with the noblest and warlikest people, whose substance lieth altogither in cattell. *Cato* being once asked by what part of Husbandrie a man might soonest bee made rich, made answere, by grasing: and being asked againe, which way he might gette sufficient liuelihoode, hee answerd, by meane grasyng. Moreouer, that the worthinesse and first originall of keeping of cattell is of greatest antiquitie, and that the trade thereof hath alwaies, from the time of the Patriarkes, hitherto been counted

The worthinesse and antiquitie of keeping of cattell.

most

moſt honeſt, as well the ſcriptures, as prophane hiſtories doe witnes, which kinde of life, how acceptable it hath alwaies beene to God, by thoſe that liued in the firſt world, doth plainly appeare. The ſcripture ſheweth how graciouſly the Lord accepted the ſacrifice of *Abel*, a keeper and feeder of ſheepe, beſides *Seth*, *Noe*, *Abraham*, *Loth*, *Iacob*, *Iob*, *Amos*. Holy and bleſſed men are commended for keeping, and feeding of Cattell, whereby attaining to great wealth, they ſuſtained them ſelues, their Wiues, their Children, and there huge families. The Sonnes of *Iacob*, when as they were demanded by the king of *Ægypt* what maner of life they ledde: made anſwere, that they were feeders and keepers of Cattell, from which trade *Lot*, *Moyſes*, *Saule* and *Dauid*, were by the will of GOD aduanced to the Crowne, as among the Gentiles the moſt auncient, and famous Princes were, ſome of them brought vp by Sheaperdes, and ſome Sheaperdes them ſelues. *Romulus* and *Cirus* being mighty Emperors, were brought vp among ſheaperdes. Beſides *Galerius Maximinus*, *Conſtantine*, *Probus*, and *Aurelianus*, came all from the Dreſſale, to the Imperiall Seate. *Homer* commendeth *Vliſſes* his Swinherd, for his great valiaunce and noblenes. That the baliant and nobleſt people haue profeſſed this trade, the Italians, Germanes, and Swetzers can teſtifie, whoſe Countries being now growne to more delicacie, then they were wont to be, were wonted alwaies, when their doings were moſt famous, to glory and vaunt themſelues of this life, as at this daie the godlieſt and wyſeſt doe. And therefore the auncient writers, as well Greekes, as Latines, do count the cheefeſt wealth to be in the numbers of Sheepe, Cattell and Fruite: for which eſtimation the Cattell were ſuppoſed to be cladde in Golden Coates: whence ſprang firſt the fable of the Golden Fleeſe of *Colcos*, which *Iaſon*, and his companions attempted to fetche, and of the Golden Apples, kept by the daughters of *Atlas*. Beſides the ſignes of Heauen, the ſeas, Mountaines, and Countries do beare their names of Beaſtes: among the ſtarres, the Ramme, the Bull: the Mountaine, *Taurus*: and the Sea, *Boſphorus*. *Italy* toke his name of Calues. Moreouer the keeping of Cattell is the worthier, in that it

The worthineſſe and antiquitie of keeping of cattell.

hath some resemblance of the state of a gouernour: and therfore the prophets in their Oracles, and Poets in their verses, doe oftentimes call kings & princes by the names of shepheardes, and feeders of the people. Yea the Lorde of the whole worlde doth call himselfe a shepheard. Since it appeareth by these examples, of what worthinesse keeping of cattell is, and howe neere it is linked with tillage, I haue here thought good, after the entreating of Tillage, Gardning, and Orchards, to describe as breefely as I can, the order and maner of keeping of Cattell: which skill though *Varro* deuideth onely into three partes, I haue deuided into foure. In the first part I put the great cattell for burden, as Horses, Asses, Mules, Camels: in the second part the lesser sort, as Sheepe, Goates, and Swine: in the third, such things as are belonging to the keeping and safegarde of Cattell, not for the profite they yelde of themselues, but for their necessarie vse, as Shepheards, Dogs, and Cattes: of these three parts in this third booke I entreate of: the fourth I refer to the fourth booke. Hauing thus declared the contention betwirt keeping of Cattell, and tillage, with the worthinesse and antiquitie thereof, I meane nowe to prosecute such things as are belonging to the same. I haue brought in the Maisters and keepers of euery kinde of Cattell, and resting themselues vpon the holliday in the greene grasse, and the Sommers shadow, euery one declaring his skill and knowledge, according to his profession. The parties are *EVPHORBIVS* the Netherd: *HIPPOCOMVS* the Horsekeeper: *HEDIO* the Shepheard, and *EVMÆVS* the Swineheard.

EVPH. How sirra *HIPPOCOMVS*, whither wander you? Do you not knowe that it is holliday, a day to dance in, and make mery at the Ale house.

HIPPO. Euery day is holly day with lazy and slouthfull marchants: it lieth me vppon to looke to my profit, to see whether my horses feede well, and that they take no harme. The pastures are so burnt with the heate of Sommer, that I am afraid for wante of meate, they will seeke to breake into other grounds, and so hurt themselues.

EVPH. Why bring you not them into this feelde, where

there

there is both a good grotten, and pretie store of grasse mong the headgroues.

HIPPO. You perswade vnot to the worst.

EVPH. Come on then, bid *Mastix* your boy bring hither your horses, and you your selfe, sit you downe vnder this Hasell, that will yeld vs both shadowe and nuttes, and we will send for *EVMÆVS*, and *HEDIO*, if you thinke good, and we will passe away the time with such talke as we shall finde.

HIPPO. Agreed. Go *Mastix*, fetch hither the Horses, with the Colts and the Asses.

EVPH. And you *EVMÆVS*, and *HEDIO*, bring your heards together, and come hither, euery man shall laye downe his shot, as they vse in the tauerne, but without money or any charges, declaring at large what belongeth to the Cattell he keepeth. Your Horses *HIPPOCOMVS* are yet in good plight, I saw the horses of our neighbour *Agrius* of late which are leaner and barer a great way. Of horses

HIPPO. Peraduenture they haue not so good loking vnto, though they neither want pasture, nor are much laboured, but mine on the other side, are continually laboured, and are not so well fed, but are better loked vnto then my neighbors.

EVPH. Wel, since both time and place requireth it, I praie you let vs heare what you can say, touching the charge and loking to of horses.

HIPPO. Surely I haue not so much money to tell, but I may well bee at leysure, and therefore since you are so earnest with mee I will not denie your request: although that of this matter, an honest and learned Gentleman of England, master Thomas Blundvile hath so throughlie written to his cõmendation and benefit of his country, as there cannot be more said: I refer you therfore wholy to him: notwithstanding breefely I wil shew you my fansie. Among al other creatures that we vse in our labour, the Horse may worthiest chalenge the chiefest place, as the noblest, the goodliest, the necessariest, & the trustiest beast that we vse in our seruice, & since he serueth to so many vses, I should here bestow some time in his praise, & in declaring his seruice, but for this, another time shall better serue.

EVPHOR. We onely here desire to know the signes of a good, and an excellent Horse, and the right manner of ordring him.

HIPPO. First, you shall knowe that Horses serue for sundrye purposes. Some, for the Plowe, the Carte, and the Packesaddle, others, for light Horses, Coursers, and Horses of seruice, others againe, for Stallions, and breeders: and therefore they must be chosen according to their seruice. Souldiers, and men of War, desire a fierse Horse, couragious, swift and well coloured. The Husbandman woulde haue his Horse gentle, large bodied, and meete for trauell and Burden. Notwithstanding, the breeding and bringing vppe of them, is almost one: for in their breeding, we hope to bring them al to the Saddle.

EVPHOR. What thinges are most to bee considered in their breeding?

HIPPO. Hee that hath a fansie to breed Horse, must first prouide himselfe of a good Race, and then of good grounde, and plentie of pasture, which in other Cattell, ought not to bee so greatly obserued, but in Horses there must bee speciall care thereof. And therefore, you must first see that your Stallion be of a good race, well proportioned, and framed in euerie point, and in the like sort, the Mare. Some reckon their goodnes by their Countreies, wherein they take for chiefe, the Genet of Spaine, the Courser of Naples, the Sarmacian Horse, the *Peloponesian*, the *Turkey*, and the *Thessalian*: but these serue chiefely for running, and swiftnesse. For largenesse of body, enduring of labor, and fitnesse for breede, the best are to be had out of *Freeseland*, *Holland*, and *Artoys*. The shape and proportion of the Horse, ought heedily to be considered, for the verie looke and countenance oftentimes declareth the goodnesse of his nature. Therefore you must diligently consider his making, from the heele to the head, and first you must cheefely regarde his feete: for as in viewing of a house, it is in vaine to regarde the beautie of the vpper Roomes, if the foundation bee ruinous: so the Horse that is not sounde of his Feete, will neither serue the Souldiour, the Husbande, nor the Trauailer.

In

In your loking vppon him therfore you must first consider his hoofes that they bee not tender and soft, but harde and sounde, rounde and hallowe, that the hollownesse may kepe his foote from the grounde, and sounding like a Cimball as (*Xenophon* saith) may declare the soundnesse of the foote, for the hoofe that is ful and fleshy, is not to be liked, and the horses that haue such hoofes doe easily halt, wherefore diuers commend a horse like the hoofe of an Asse, the pasterns nert to the hoofe not to longe as the goat hath, for shaking off his rider, and breeding of windgall, nor to short, for being hurt in stony grounde. The legges and the thies, sith they are the standardes of the body, they ought to be euen, straight, & sound, not gouty, with much flesshe and vaines, for such as haue their legges clad with much flesshe and vaines, they with great iourneies growe full of windgals and swellinges which will cause them to halt, which legges at the first foling, are as long as euer they wilbe, by reason wherof you may gesse what heigth the horse wil be of, being yet a Coult. The knees must be round, flexible, and small, and not bowing inward nor stiffe, the thies large and well brawned, his breast great and broade, his necke soft and broad, not hanging like a Goates, but vpright like a Cockes, and well reining, his mane thicke, falling on the right side, some like it better on the left, his head smale and leane, for a great and heauy head, is a signe of a dull Jade, his mouthell short, his mouth wide with large wrinkles, still playing with the Bitte and foming: as *Virg.* There stamping standes the steed, and foamy bridell fierce he champes. The horse that hath a drie mouth is nought, his chekebones would be euen and small, for if they stand to farre a sunder, he will be ill to be bridled, and the vneuennes of the Chekes, will make him headstrong, and neuer to reyne well, but to thrust out his head ilfauoredly, his eies great bluddy, and fiery and standing out of his head, which is a signe of quicknes and liuelines: hollow and little eyes are naught, and blacke, or pale starres in the eies are to bee dispraised: these faultes are best spied in the night by candell light. *Columella* commendeth blacke eies. A wall eie is verie good, such as they saye *Alexander Bucephalus* had. The eares must be shorte, standing

The hoofes.

The legs.

The knes
The thies
The breast
The neck
The mane.

The hed.

The mouth.

The eies

The eares.

vpright, and ſtirring, for the eares, bee the tokens of a Horſes ſtomacke, which if they bee great and hanging, are ſignes, of a Jade. The Noſtrelles muſt be wide, the better to receaue aire, which alſo declareth a liuely courage, his ſhoulders large and ſtraight, the ſides turning inwarde, the ridge bone ouer the ſhoulders being ſomething hie, giues the horſeman a better ſeate, and the ſhoulders, and the reſt of the bodie, is ſtronger knitte together, if it be double, his ſides deepe, well knitte behinde, and ſomething bowed vppe, which both is better for the horſeman, and a ſigne of a great ſtrength: his loynes, the broder they bee, the better he lifteth his foreefeete, and followeth with the hinder, and his paunch ſhal the leſſe appeer, which both diſgraceth him & burdneth him, his belly muſt be gaunt, his buttockes large, and full of flesh, anſwerable to his breſtes, and his ſides, for if he be broad hanched, and well ſpred behind, and goeth wide, his pace will be the ſurer, which we may perceaue in our ſelues, if wee aſſaile to take vp a thing from the ground, ſtryding, and not with our legges together, we take it vp with more eaſe and ſtrength. Hys tayle woulde be long, briſtly, and curled, the length wherof, is not only a beautie, but alſo a great commoditie to him to beate away flies: yet ſome delight to haue them curtailed, ſpecially if they be broade buttockt. In fine, the whol body would be ſo framed, as it be large, hie, liuely ſpirited, and well truſſed. Some horſmen would haue their horſe to be limmed after the proportion of diuers beaſts, as to haue the head and legges of a ſtagge, the eares and tayle of a fore, the necke, of a ſwanne, the breſt of a lion, the buttockes, of a Woman, and the feete of an Aſſe. *Virgill* in his *Georgickes* doth verie clarkely deſcribe the tokens of a good Horſe.

The noſtrell.

The ſholder.

The chyne.

The ſides.

The loynes.

The belly.

The buttocks.

The taile.

With head aduaunced hie at firſt, the kingly Colt doth pace.
His tender limmes aloft he lifts, as well beſeemes his race.
And foremoſt full he goeth, & through the ſtreame he makes his way.
And ventures firſt the bridge, no ſudain ſound doth him affray.
Hy creſted is his necke, and eke his head is framed ſmall.
His belly gant, his backe is brode, and breſted big withall.

The bay is alwaies counted good, ſo likewiſe is the gray.
The white, and yellow worſt af all, beſides, if farr away
There happen a noiſe, he ſtampes and quiet cannot reſt.
But praunceth here and there, as if ſome ſpirite were in his breſt.
His eares he ſettes vpright, and from his noſe the fiery flame
Doth ſeeme to come, while as he ſnuffes, and ſnorthes at the ſame.
Thicke is his mane, and on the right ſide downe doth hanging fall.
And double chinde vpon his loines, a gutter runes withall,
He ſcraping ſtandes and making deepe a hole, he pawes the ground.
Whiles as aloud his horned houfe, all hollowed ſeemes to ſound.

You ſée in howe fewe verſes the poet hath expreſſed the properties of a good horſe: other conditions there bée for which they bée liked, when they be pleaſant, firſt liuely, gentle, and tractable: For ſuch as *Columella* ſaith, will both better bée taught, and better away with trauell. *Xenophon* accounteth it a ſigne of a good horſe, if after the wearines of his iourney hée ſéeme to labour luſtely: againe, we finde by experience, the better the horſe is, the déeper he thruſts his head into the water when he drinketh, and that (being a Colte) ſtriueth to outrun his fellowes in the paſture, and as *Virgill* ſaith, leape firſt into the water, and paſſeth bridges, not tarrying for an other, nor fearing the iſſe.

EVPHOR. What colour in Horſes counte you the beſt. The Poet ſéemeth to miſlike the white, which others againe, as I haue ſundry times hearde, commend, ſpecially in Englande, where they are well accounted of, and moſt eſtéemed.

HIP. Touching the colours, there are diuers opinions, and of all colours, lightly you ſhall finde both good and badde: ſo that the colour is not ſo greatly to bée regarded, if he haue other tokens of a good horſe, yet for beautie, and many times for goodnes, we make choiſe of colour. The beſt colours as diuers ſuppoſe are theſe, the rone, the white liarde, the bay, the ſorrell, the dunne, the daple gray, the aſhy white, the ſlebitten, the milke white, the blacke, and the Iron graie, the bay is moſt of price as farre as I ſée at this daye, and pre-

ferred by the Poet aboue the reſt. The Frenchmen call the bay horſe *Le Bayard loyal*, truſtie Bayard: they are the better that haue a ſtarre in the forehead, and the fote ſpotted a litle with white, aforetime the dapple gray, the ſlebitten, th mouſedun, and the griſell were moſt eſtæmed, and ſuch as came neareſt to them, as the iron gray, the bright forell, the browne baye. Onely *Plato* commendeth the milke white, that *Virgil* diſpraiſeth. Others commende the blacke, ſpecially if he haue either white ſtar in his forehead, or ſtrake downe his face, or hath any white vpon his fote, the cole blacke without any white, is altogether miſliked, the fleabitten horſe prooueth alwaies good and notable in trauell: the yelowiſh and the ſkued or pied horſes are diſcommended almoſt of all men, notwithſtanding either of them (if they be well marked) proue oftentimes well enough, ſpecially the yellowiſh, if he haue a blacke liſt downe his back frō the neck to the taile. The Stallion therfore would bee of one colour, ſtrong bodied, well limmed, according to the proportion afore. The Mares woulde likewiſe haue the ſaide proportion of the ſtallion, ſpecially to haue large bodies, faire and beautiful, of one colour, great bellied, with large & ſquare breſt and buttockes.

The Stallion.

The Mares.

EVP. What age count you beſt for bræde?

Age.

HIP. The Stallion may goe with the Mares when his iointes and limmes bee well knitte and come to their growth, for if they be too yong, they get but weake and wearish coltes: ſome vſe to let them go together at two yæres olde, but thræ yæres olde is the better: the ſtallion will ſerue you from that time till twentie yære, it hath bæne ſæne that they haue gotten coltes till fortie, being helped a little in their buſineſſe, for it is not yæres but ſkill that abateth luſt, as *Ariſtotle* afore *Plinie* wrote. Yet ſome thinke them not mæte for bræde before the fourth or fifth yære, in which ſpace they fede them luſtely, to make them more coragious, for the luſtier they be the better coultes they bring, neither woulde they haue vnder fyrtæne Mares, nor aboue twentie, for one ſtallion. *Herodotus* writeth that one horſe wil wel ſuffice twentie Mares, but the number ought not alwaies to be obſerued, but ſometimes more, ſometime

times leſſe, according to the ſtate of the horſe, that he may the longer endure: a young horſe ſhould not haue aboue fifténe or ſirténe Mares with him: the horſes muſt be ſometime ſeuered, for danger and hurting of themſelues, hauing in the meane time good regarde to the ſtate of his body, for ſome be weaker and fainter then others.

EVP H. What age doe you thinke beſt for the Mare to go to the horſe.

HIPPO. The Mares will conceiue at two yéeres olde, but I take it the better not to ſuffer them till they be thrée yéere olde, as likewiſe I thinke them not méete for Coultes after ten, for an olde Mare wil alwaies bring a dull and heauie headed Jade: the goe with Foale aleuen monthes, and foale in the twelth.

EVP. Howe can you knowe their age when you be doubtful of it?

HVP. That may you knowe diuers waies, but ſpecially by the téeth, and thoſe téeth that declare the age, the Grecians call γνμμιτες, which téeth when he loſeth, he loſeth both eſtimation and ſale. *Ariſtotel* affirmeth that a horſe hath 40. téeth, of which he caſteth the thirtieth month after his foaling foure, two aboue, and two beneath, againe in the beginning of his fourth yéere he caſteth likewiſe foure, two aboue and two beneath, being full foure, and going vppon his fift, he caſteth the reſt both aboue and beneath: ſuch téeth as come vp againe be hollow: when he beginneth to be fiue yéere olde, the hollownes of his firſt téeth is filde vp: in the ſeuenth yéere all his téeth are filled vp, and no hollownes any longer to be ſéene: after which time, no iudgement of his age by his téeth is any more to be had: ther are ſome that take vpon them to tell his age by the Joyntes of his taile, after the marke is out of his mouth. *Palladius* ſhewes, that a horſe when he beginnes to be olde, his temples ware hollowe, his eye bries gray, and his téeth long. *Ariſtotle* ſaith, that the age of all fourfoted beaſtes may be knowene by the ſkinne of their Jawes: for if it be pulde vp and preſently let fall againe, if it fall ſmoothe, it declares a young beaſt, if it lie in wrinkles, it ſheweth he is olde. A horſe liueth

commonly

commonly twenty yéeres, some thirtie, or fortie, and also to fiftie, as *Aristotle* saith, if he be of a good disposition and well dieted, it is said there haue béen horses that haue liued 75. yéeres, the Mare liueth not so long as the horse, nor the Stallion, so long as the horse that is suffered to run amongst Mares: the Mare leaueth growing at fiue yéere olde, and the horse at sixe or seauen.

EVPH. What tyme thinke you best for couering of Mares.

HIP. In the Spryng, after the twelfth of March, I take to be the best, after the Spring in the rest of the yéere they are to be kept from the horse, for hurting of the Horse: for the Mare after shée hath conceiued, suffers the Horse no more, but beates, and strikes him with her héeles, yet in most places, they suffer their stallions to run with their Mares all the Sommer long, and take it to be the best way, for answering the Mares desire, for many times the Mare wil not abide the horse till Sommer time, or August, and the August Coult prooues cōmonly very faire, although the coults that are foaled in the Spring, are not to be desired, because they runne all the yéere with their dammes in good pasture, and therefore it is best at that time to put the Mare to the Horse, for these creatures specially, if you restrain thē, are most enraged with lust, whereas came at the first the name of that deadly poison *Hippomanes*, because it stirreth vppe a fleshly affection, according to the burning desire of beastes, which groweth in the forehead of the coult, of the quantitie of a Figge, and blacke, which the damme doth straight, as sone as she hath foled, bite off: and if she be preuented, she neither loues the Colte, nor suffers him to sucke, neither is to be doubted, but that the Mares in some Countries so burne with lustе, as though they haue not the horse, with their owne feruent desyre they conceaue and bring forth after the maner of Byrdes, as the Poet noteth.

In furious lust the Mare exceedes all other beastes that be.

It hath bene said, that in Spaine Mares haue conceaued with the winde, and brought vp their Colts, but the Colts haue not liued

liued aboue three yeeres. *Aristotle* writeth, that a Mares desire is quenched by shearing of her mane.

EVPHOR. What if the Mare will not take the Horse, is there no meanes to make her?

HIPPO. There are that rubbe her taile with Sea Onions, Nettles or Madder, and so prouoke her to lust, some time a skuruy Jade is put to her, who when he hath gotten her good will, is straite remoued, and a better Horse, put in place. If the Horse bee toslouthfull, his courage is stirred vp by wyping her Tayle with a Spunge, and rubbing it about his Nose. If we would haue a Horse Coult, we knitte the lefte Stone of the Horse with a Corde, and for a Mare the right. The like is to bee obserued almost in all other beastes.

EVPHOR. Howe often must she bee Horsed after she take.

HIP. They take not alike, some are spedde at once, some twise, some more. It is saide, a Mare will not suffer aboue fifteene times in the yeere: being oftentimes satisfied with fewer. They must be put to the horse at times twyse a day, in the morning and at night, when they are sped, it appeareth by refusing and striking at the horse. They say, there is amongest these beasts a great regard of kindred, and that you can hardly force the Coult to horse the Damme: for proofe whereof they report, that whereas a certayne Horsekeeper did make hys Horse, by couering his eies, to couer his Damme, the cloth being pulde away, when he sawe what he had done, hee ranne vpon his keeper, and slewe him: as sone as shee is couered, the Mare must out of hande be beaten, and forced to runne, least shee lose that shee hath receiued. Surely a Mare of all other beasts, after her couering, doth runne either Southwarde, or Northwarde, according as she hath conceaued either Horse Colt or Mare Colt: her colour also doth change and become brighter, which when they perceaue, they offer her the Horse no more. Some after a fewe daies if they doubt her, offer the horse again, and if she refuse and strike (as I saide before) they iudge she hath conceaued.

EVPH.

EVPHOR. Must they be couered euery yeare.

HIPPO. Such is our couetousnesse, as we seeke to haue them beare euery yeare: but if you will haue good Coultes, let your Mares go to horse but euery other yeare, so shall they well answere your desire, howbeit the common vse is euery yeare.

EVPHOR. We see Asses sometimes to couer Mares commonly, and thereof is engendred the Moile, & foaled in the xij. moneth, as shall be said hereafter. Some say it is best to cut the mane of the mare that shalbe couered of the Asse, thogh others hold opinion that it shal abate her lust. The mares that be with foale, must be well loked vnto, and put in good pasture. And if thorowe the colde Winter, pasture be wanting, they must bee kept in the house, and neither labored nor iadled vp and downe, nor suffered to take colde, nor to be kept too many in a straight roome, for casting their foales, for all these inconueniences wil hazard her foales, yet to trauell them moderately, will doe them rather good then harme, for too long rest will cause them to be restife, and to tyer soner. *Aristotle* writeth, that the *Scythians* did vse to trauell their Mares great with foale after the time they began to stirre, supposing their foaling should be the easier, but good heede must be taken, that their bellies bee not hurt with any thing while they are with foale, but if so bee the Mare be in danger, either in casting her foale, or in foaling, the remedy is, *Poilipody* stamped, mingled with warme water, and giuen with a horne: it is saide that the smell of a Candell snuffe causeth them to cast their foales: you must euery yeare ouersee your Mares, and such as bee vnprofitable or barraine, must bee put away, for from their first foaling, they are not to bee kept aboue tenne yeares, at which time they are lustye enough, and may be well solde, but so wil they not be after: The yong foales are not to bee handled with the hande, for they are hurt with the lightest touch that may bee. It must bee seene vnto, that if the Mare be housed, there be roome enough for her & her foale, and that the place be warme enough, that neyther the colde harme it, nor the Damme ouer lie it, and therefore the place must be well chosen, that is, neither too hotte, nor

too

to cold, and afterwardes by little, you must bring vp the Colte: when it groweth to be something strong, it must be put to pasture with the Mare, least the Mare receiue hurt, by the absence of it: for chiefely this Beast of all others, most estæmeth her yong, and if she be kept from it, taketh harme. The Fole that lackes his damme, is often brought vppe, of other Mares, that haue Coltes: the Mare must go in very good pasture, that the Colte may haue store of milke. Being fiue moneths olde, when you bring them into house, you must feed them with barly flowre and braune, at a twelue moneth olde, you must either put them into good pasture, or feede them with Braune, Chaffe, and Hay. *Varro* will not haue you to weane them, till they bee two yeeres old: and though I like not to sone weaning, yet we vse commonly to weane them at fiue or sixe moneths old, and to let them runne in good pasture, which custome proueth not amisse. Moreouer as long as they runne with the Damme, you shall do well to handle them now and then, least, when they be put from the Damme, they ware wilde: they must bee taught to be gentle, and not onely to abide a man, but to couet his companie, and not to be afraied at euery strange sight, nor at euery noise that to come to it. *Xenophon* saith, we must, (as men) prouide schoolemasters for our Children, so likewise teachers for our Horses, and appoint how we will haue them broken: for as their seruice is diuers, so must be their breaking. But hereof we shal speake more hereafter, when we entreat of horsemanship, and breaking of horses: onely now we wil deal with those that sucke, and serue for the Plow. To make them gentler, the bridles and other horse harneies must be hanged by them, that they may the better be acquainted with them, both with the sight, and the gingling. Now when they be wel tamed, and wil suffer to be handled, *Varro* woulde haue you lay a boy grouelling vpon them twise or thrise, and after to bestride them, and this he would haue done, when they be three yeere olde, for then they grow most, and begin to be great brawned. There be that thinke a Horse may begin to be handled at a yeere and a halfe olde, and *Varro*, at three yeere old, when their prouender is giuen them: but we vse commonly after two yeeres to labor them gently

gently, first in harrowing of newe plowed land, which is good both for their fote, and their place, and also with plowing, and such like exercise: whereby we vse to acquaint them with colde and heate, in drawing together. It must be seen to, that they be euen matched, least the stronger spoile the weaker, while he dreadeth the rating and whipping. Horses take lesse harm with drawing then with bearing. Thus must they be vsed to reasonable trauell, by reason wherof, they wil be the harder, and not so lightly take harme: but herein must be great discretion.

EVPH. What saye you to Geldinges? for in these partes we vse Geldings most.

HIPPO. They serue for some purpose, but he that will haue a good Gelding, must geld (as they say) a good horse, they are cut at a yeere old and elder: I my selfe haue cut them at fiue yeere old, & fiue yeere old: in cutting they lose their stomack, you must loke that they be in good plight when you cut them, for as they are at their cutting, they commonly continue. The Mares also vse to be spaied, but not often, and with great danger.

EVPH. What maner of stable would you haue, for I haue sometimes heard, that the stable is of great importance?

Stables. *HIPPO.* Your stable must be build in a drie place, for wetting the horses howfe, whith you shall auoide, if you planke it with good Oken plankes, or (which *Xenophon* woulde rather haue you do) with round pauing stone, keeping it alwais clean from doung, and straw, and after laying fresh littter, so as they stand hard, and lie soft. *Xenophon* woulde haue the stable so placed, as it may alwaies be in the Walkers eie, and to be lightsome, least the horse being vsed to the darke, his eie dasell at the light. Some think they wil be the gentler, if they be vsed to the light, and the fairer, if they haue the sunne at his rising in sommer time: let as much aire come to them both day and night as you can. In Winter your stable should rather be warme, then hot, and therfore your stable must stand toward the South, but so as the windowes may open towarde the North, which being kept shut in Winter, may be warme, and opened in Sommer, you may let in the cole aire.

EVPH. The like we vse in our Ore stals.

HIPPO.

HIPPO. Beſides, whereas the bodies of cattell, haue néd of rubbing, as well as mens bodies, for many times it doth the horſe as much good to bée ſtroked downe the backe with your hand, as to fæde him. The horſe is to be continually curried in the morning, at night, and after his labour. In curryng of them we muſt begin at the head, and the necke: for it is a vaine thing to make cleane the lower parts, and leaue the other foule. It is good alſo to obſerue due times for his fæding, his watering, and his trauaile. Thus much of his exercíſe. Now followeth to ſpeake of his diet: and becauſe we haue ſpoken before of his paſture, we muſt alſo ſay ſomewhat of his other fæding. The better a man would haue his horſe to proue, the better muſt he looke to his meate, for the good fæding (the country people ſay) is a greate helpe to the goodneſſe of the horſe. If the horſe bée young (as I ſaid before of Coltes) he muſt be fed with graſſe, chaffe, and hay: if he be elder and méet to trauaile, his fode muſt be the drier, as Chaffe, Barley, Oates, and Hay. Chaffe doth not ſo wel nouriſh, by reaſon of the drineſſe, but it kæpes the body in good plight: and becauſe hard meat is hardeſt of digeſtion, it is therefore to bée giuen to thoſe that labour. The ſtocke or ſtudde, muſt be paſtured in large paſtures and marſhes, as alſo vpon mountaines and hilly grounde, but euer well watred, not dry, rather champion then woody, and rather ſoft ſwæt graſſe, then hie and flaggy: if the paſture be to ſhort, they ſoner weare their foretæth, & are toothleſſe before their ful age. And where as euery kind of Creature is naturally moiſt, a Horſe ought chéefely (whether he be young, or olde) to be fed with moiſt paſture, for the better conſeruation of his naturall temperature. Some would haue you in no wiſe to giue your horſe graſſe in the ſpring time, but in June, or the fall of the leafe: they would haue you giue them graſſe with the dew vpon it, & in the night ſeaſon Oates, Barly, and hay. Howbeit, in the colder countries in Germany, France, England, where the paſture is very good, they doubt not to ſkowre their horſes with greene graſſe and weedes of the meddowes: & in the hotter countries, they do the like with greene blades of wheat, or barly. Some vſe to geue them apples ſhared in peces, to ſkoure thē withal, & thus much of

Curryng.

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skouring of Horses. Generally whosoeuer will haue his Horse healthy, and able to endure trauell, let him fæd his Horse with Oates, mingled with chaffe or straw, so shal he be temperately and well fed, and if so he labor much, giue him the more Oates. His meate must be giuen him as some thinke best, in a lowe Manger, set so lowe, as they are forced to eate their meat with some difficultie or trauell, which they saye is to make them bend their neckes: by which exercise both the head, and the neck groweth bigger, and they will bee the easier to be bridled: besides, they will be the stronger, by reason of the hard setting of the foreféete. Howbeit, in some places, they vse hie standing Mangers: after what sort soeuer they be, they must alwaies be kept cleane, and wel swept before you cast in their meat. Their Prouender though diuers Horsecoursers, that liue by sale of horse, do fæd them with sodden Rie, or beanmeale sod, pampering them vp, that they may be the fairer to the eie: yet is it not good fode to labor with. The best Prouender that is, is Oates, and for default of them Barly: you must beware you giue them neither Wheate, Rie, or any dry pulse: their prouender must be giuen them rather often, and littel, then once or twise a day in great portions, least you glutte them therewith: they are vsed to be fed commonly fiue times a day, when they stande in the stable, kæping an equall number of houres betwæn the times: when they trauell you may giue them meate seldomer, but in greater quantity, and if their iournies be long, they must haue prouender besides in the night, alwaies remembring (as I saide) that you glutte them not. The better a horse fædeth, the better will he labour. You must also beware that you giue him no prouender, neither Oates nor Barly, after any great labour, till he be thorowe colde: notwithstanding you may giue him a little hay to cole his mouth. The hay must be sweete and wel made, and thorowly shaken, before it be cast into the racke: and specially sæne to, that there be no feathers of any fowle amongest it. If the Horse be very hotte after his labour, let him be well couered, and softly walked till he be colde, before you set him vp: when he is set vp, litter him well, least the coldnesse of the ground strike into him: in any wise wash him not when he

Prouender.

is hot, but when he is through colde, water him, and wash him, wiping him dry when you bring him in. If the Horse forsake his meate, some vse to stampe Garlike and Pepper, and to giue it him, rubbing his teeth well, till his stomacke come to him: some would haue a clout wette in salt water tied vpon a sticke, and thrust into his Iawes. In watring, you must loke well vnto him, for (as *Aristotle* saith) beastes do fede, and are nourished the better, if they be well watred. Horses and Camels, do loue best to drinke a thicke troubled water, in so much as if ỳ water be cleare, they will trouble it with their feet: for the most Bullockes againe desire a faire cleare water, & running. The same *Aristotle* also affirmeth, that a Horse may suffer thirst. 4. daies without drinke. *Varro* willes you to water your horses twise a day, which order we obserue, that is once in the morning, and againe in the afternoone: but in winter, if they drinke but once a day, it suffiseth: before you water him, he must be well rubbed, and then ledde into the water vp to the knees, specially if he be leane, if he be fatte, he may goe the deeper. Notwithstanding there are some that hold opinion, they ought not to goe so deepe, as their stones touche the water, specially if the Horse be young. After March, and the spring, it is very good to ride them vp and downe in some River, which will exercise their legges, for the water dryeth the legges, and restraineth the humors from falling down, and keepeth them from windgalles: as soone as they come from the water, you must with a little straw wipe them cleane, for the dampe of the stable causeth inflamation in the horses legges that be wette. The water (according to *Vegetius* his mind) would be cleare, and springing, other like it a little running and troubled in a clay ground: for this water by reason of the thicknesse and fatnesse, doth better nourishe and fede the horse, then the swift running streame: yet those Horses that are vsed to the swift and cleare Riuers, are cõmonly the strongest and best trauaylers, and therefore it would be well considered how the Horse hath ben accustomed: the colder ỳ waters are, the lesse they nourish, the deeper a Horse drinkes, the fatter he proues: and therefore some Horsetourlers vse to washe their horses mouthes, first with water, and after to rubbe them with

salt, to giue them an appetite to their meate and their drinke.

EVPHOR. I praye you let us heare some remedies for horses diseases, for (as *Aristotle* saith) a horse hath as manye diseases as a man.

HIP. As touching diseases in a horse, it is better to preuent them by good heede taking, and (as *Vegetius* saith) to bee more carefull in keeping a horse healthy, then when he is sick to cure him: which health you shall continue with ease, if you will obserue those thinges, touching his diet, his stable, and his labour, that I haue tolde you of before. Whosoeuer will haue a good horse, and keepe him in good estate, must oftentimes see him, come to him, handle him, and stroke him: for that both makes him gentell, and giues him a faire coate: and bee still mindfull of the olde prouerbe, the Maisters eye maketh a fat horse, and to bee short, to haue him so still in his sight, as hee rather want his owne meat, than his horse should: for hee that neglecteth his horse, neglecteth himselfe. To let him haue moderate exercise, and to ride him nowe and then (if the weather be faire) into the fielde, will do him great good: the morning is better to labour him in then the euening, neither must you in Winter, or in Sommer ouerlabour him, for being in a sweate, and after taking colde, he falleth into dangerous diseases. And therefore remember what I saide, that where soeuer you haue laboured him, or ridden him, be sure you couer him with some cloth, and walk him softly, that he may be cold, before he either be suffered to eate or drinke: when he is colde, he may be led to the water, and washed: so as when you bring him into the stable, you litter him well, and throwly rub him, and so giue him meate. If he be ouer trauelled, the onely remedy is rest, and after his sweating, to washe his mouth in Sommer with water and Wineger, in Winter with brine: for the neglecting of these thinges, hath beene the destruction of many a good horse. Also, to powre into his mouth wine and oyle, in Sommer colde, in winter warme (as *Vegetius* teacheth) and as we finde by experience, is verye good: for it is commonly seene, that a tired horse (if necessitie forceth a further iourney) with powring in a quart of good wine, will trauell lustily. You must not suffer

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your horſe to drinke after his iourney, till he be colde: howbeit, if he ſweate not to extremely, and be ridden ſone after, it is not ſo daungerous: it is farre better to let him thyrſt, then to geue him colde water if he be hotte. If a horſe haue long reſted, he is not to be trauayled vpon the ſudden, either in galloping, or long iourney, but to be laboured faire and ſoftly at the firſt. A horſe that is weary, or tyred, wilbe wonderfully refreaſhed, ſo as it would ſeeme he had neuer beene trauailed, if he may wallow him ſelfe either in the ſtable, or other dry place out of the wind and raine, and therefore *Xenophon* would haue neare vnto euery ſtable, a place meete for their wallowing, wherein after their iournies, they may tumble them ſelues: for in ſo doing, they ſhew they are in health, and refreſhe them ſelues. You muſt looke diligently that they be well looked to at night, and that after their ſweat, they be wel rubbed and curried, and that they be not diſquieted when they ſhould reſt. In winter, they would be clothed with woollen for taking of cold, & in Sommer with Canuas, to keepe them from flies. You muſt beware, that you iourney them not long without ſtaling, but after, you haue trauailed an houre, or ſuch a thing, prouoke the to ſtale (by riding them out of the way) into ſome place where ſheepe haue dounged, or into ſome hie graſſe, ferne, or ſtubble, which order was continually obſerued by the beſt dyeter of horſes, that euer I knewe in England, one Henry King, who hauing charge of that moſt worthy gentlemans horſes, Sir Thomas Chalenour, caried a fayre companie of Geldinges from London, to the Court of Spaine, who notwithſtanding their long iourney through Fraunce, and the painefull paſſage of the *Pirenies*, by the ſkilfull diligence of their keeper, came thither in as good plight as they came out of England. And if ſo be you ſee he cannot ſtale, or ſtaleth with paine, you muſt bathe him with bath appointed for colde, that is, oile mingled with Wine powred vpon his loines: alſo a louſe put into his yard, or Sope put into his fundament, hath beene ſeene to helpe him. If this doe not helpe, you muſt ſquirt in honie boiled thinne with Salt into his yarde. Some would haue the licour of the lime *Bitumen* ſquirted in: *Æliomus* writeth, that the horſe that

cannot stale, is presently remedied, if so bee a maide strike him vppon the face with her girdell, the fæte (which is the chæfest matter in a horse) you shall alwaies kæpe sound: if as I tolde you afore, your stable be well paued with rounde stone, or wel planchered and kept clean: which done you must stop his hoofes with cowe doung, or for want therof with horse doung watred, and the legges must be often rubbed with a strawen wispe. To cause the hoofe to growe, or to repaire the broken hoofe, take of Garlike heades, seuen ounces, of hearbegrace three handfuls, of Allome beaten and sifted, seauen ounces, of Barrowes grease very olde two poundes, mingle all these with a handfull of Alles doung, boile them, and annoint the hoofes therewith. After their iourney, sæ you search their fæte well, suffering no grauel, nor filth to remaine therein, you shal well refresh their hoofes with the ointment aforesaide. The iointes, or the pasternes, would be well bathed after their trauell with warme wine, or an egge or two would be thrust into their hoofes, the legges themselues woulde be washed, with warme beere, or some like bath. If the Horse thrust out one of his fæte, and stand not euen, it is a signe of some faulte in the foote: the horse halteth, either by reason of the spoiling of his hoofe in iourney, or by ill shoeing, or by vnholsome humors fallen downe, by long standing in the stable, or by windgals. If the fault be in the shoeing, strike vpon the head of euery naile with the hammer, and when you perceiue him to shrinke, plucke out that naile, or powre vppon the hoofe colde water, and that naile that is first dry, plucke out: if it matter, squeese it out, and powre in Pitch well sodden with olde Swines grease: you must also spædely open his hoofe belowe, that the matter (if it bee full of corruption) may descende, least it breake out aboue the hoofe, and so cause a longer time of healing. The signes of it be, if hee holde vp his foot, which if you do pare him to the quicke, and where you perceiue it to looke blacke, open it, and let out the matter: if he be hurt inward, and standeth but on his toe, it sheweth the fault to be in his hoofe: but if he treade equally with his foote, it declares the græfe to be some other where, then in his hoofe: if in his haulting he bowe not his iointes, it is a signe the sore

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is in the ioyntes. For all halting generally, mingle Hemp with the white of an egge, and ſtop the foote withall, and after clap on the ſhowe: if it be a wound, put herein the pouder of Diſter ſhelles, and Verdegreaſe to dry it vp, or the white of an egge, with Swte and Vineger. The Cratches (as they commonly call them) is a malady that happeneth betwirt the Paſternes and the Hoofe, in the manner of a ſkabbe, and is ingendred of the dampes of the ſtable, while he ſtandeth wette legged: the remedy whereof, is all one with the paines, which is likewiſe a ſoraunce breeding about the ioyntes, breaking the ſkinne, and mattring: taking away the heare, waſhe the ſore with warme Beere, or with the broth wherein is ſodden mallowes, Brimſtone, and ſheepes ſuet, which muſt be bounde about the ſore place morning and euening, or elſe ſheepes ſuet, Goates ſuet, Swines greaſe, Verdegreaſe, and quicke Brimſtone, Bolearmeniacke, and Sope, boyled and made in oyntment, wherwith you ſhal anoynt ỹ ſore twiſe a day, waſhing it firſt with warme Wine, and after it is dried annoint it, in the meane time keepe him out of the water: the lees of wine is alſo ſometime vſed in the curing of the cratches. windgals, which are ſwellings, and riſings in the Legges, are cured with cutting, and burning: ſome thinke they may be reſtrained and cured, by riding the Horſe oftentimes vppe and downe in ſome colde and ſwifte ſtreame, alſo by waſhing his legges wyth Salte, Vyneger, Swines greaſe, and Oyle, wrapping them vp certaine daies, or by launcing, or ſcarrifyng they are cured: the outward ſores are healed by burning. If the backe be wrong with the ſaddell, or otherwiſe hurt that it ſwel, *Vegetius*, would haue you to ſeeth Onions in water, and when they be ſo hot as the Horſe may ſuffer, to lay them vppon the ſore, and bind them faſt, which will aſſwage the ſwelling in one night. Item Salt beaten and medled with Vineger, putting to it the yoke of an egge, layed vppon the ſwelling, will heale it: beſides, Arſſmart ſtamped and laide to, doth preſently aſſwage the ſwelling. If the backe bee galled, waſhe it with Beere and Butter, or caſt vppon it the powder of a Lome wall. There is a diſeaſe that is common in Horſes, called the Vines, which if he haue, turne downe his

eare, and launce the sore at the rote of the eare, & take out the matter: but take good heede you cut not the vaine that lieth a little aboue. If a horse haue beene set vp hot after his iourney, and in his heate hath beene watred, or taken cold, which the Germanes call *Verfaugen*, in English foundred, or in some places fraide: the remedie is the skinne of a Weesell cut in small peeces, fresh butter, a rotten egge and vineger mingled together, and powred into the Horse with a horne: after which, let him stand couered with a wet cloth, till he ware hot. A present, and assured cure for this disease, I learned not long agone, of that honest, wyse, and valiaunt Gentleman, captaine Nicolas Malbee, in whom there wanteth nothing belonging to a worthy soldier. His medicine was this: Garter each leg immediately one handful aboue the knee with a liske, good and hard, and then walke him to chafe him, and put him in a heate, and being somwhat warmed, let him blood in both the brest vaines, and in the vaines of the hinder legges, betweene the howse and the Pastorne, reseruing the blood to make a charge withal in this maner. Take of that blood two quartes, and of Wheate meale, as it commeth from the Mill, halfe a pecke, and fiue egges, shelles and all, of Bolearmoniacke halfe a pound, of *Sanguis Draconis* halfe a quarterne, and a quarte of strong vineger: mingle them all together, and charge all his shoulders, brest, backe, loynes, and forelegs therwith, and walk him vpon some hard ground: three houres after, leade him into the stable, and let him stande tyed two houres to the racke, without meate or drinke, & walk him then two or three houres more, and then giue him a little warme water, with ground Malt in it, and after, a little hay, and prouender, then walke him again vpon the hardest ground you can get: you shal ride him the next day a mile, or two softly, and so from day to day, vntil he be wel, which wil be within three or foure daies. Remember to let him stande the first day after his first walking, two houres in water vppe to the belly: this medicine is infallible. The colicke, or paine in the belly, is thought wil be eased in a horse, or mule, onely with the sight of a Ducke, or any water foule. To keepe your horse from flies, it is good to washe him ouer with the iuice of the leaues of the

Gourde

Gourde in the middes of Sommer. Many times Horſes are troubled with wormes, or bots, which you ſhal perceiue, if they caſt their loke vpon their belly, if they wallow oftentimes, and ſtrike their belly with their fote: the remedy, is Harts horne, Sauine beaten, and geuen him with a little vineger in a horne. *Columella* would haue you rake the Horſe with your hand, and after that you haue plucked out the doung, to waſhe his fundament with ſea water, or brine. *Braſanolus* in his commentary vpon *Hippocrates*, declareth how he cured the Duke of *Ferars* horſe, being in great danger with wormes, by geuing them quicke ſiluer, and *Scordium*, or water *Germander*, when no other medicines would helpe. The Rhewme, or diſtillation, maketh a horſe ſlothfull, dull, and faint, yet will he be led, & ridden, and moderate labour is not amiſſe for him, let him drinke warme water with Wheate branne: the more filth he voides at the mouth, the better will it be for him. There are ſome diſeaſes thought to be vncurable, which if the Horſe had, and was ſold, by the olde lawes he was to be turned backe againe, except the bargaine were otherwiſe: of which number ar, ỹ broken winded, the lunatike, and the mangines, called the Farcine, which diſeaſe if it come once to ỹ ſtones, is thought vncurable. To this they adde the through Splent: ſome thinke ỹ broken winded is not to be cured, becauſe it is like to the conſumption of the longs in a man, yet ſome hope of recouery there is, if it be taken in time: for letting of blod in dry diſeaſes, is againſt reaſon. But you may annoint the hole body with wine & oyle, mingled together & warmed, and curry him againſt ỹ heare till he ſweate, and geue him this drinke inward from the firſt day: the iuyce of Piſan, Swines greaſe clarified, & *Amylum*, in new ſwéet wine, which being boiled together, you may geue it him with a horne to open his pipes, & ſet him ſo as he ſtand warme. The lunatike eyes, are cured by letting him blod in the temple vaines, bathing the eyes on ỹ outſide with ſome warme bath, & putting into them ſom ſtrong water certaine daies, til they be hole. For the mangineſſe, take the wormes called *Cantharides*, beating them, & mingle with them a little Verdegreaſe, and ſo annoint them with it, warming the body of the Horſe with a firepan.

Others vse to washe him with warme water twise a day, and after, to rubbe him wyth Salt sodden in water, till the matter come out. Aboue al other, they say it excelleth in the beginning to anoint him with the fat of a Seale: if it haue run long, you must vse stronger medicines, as Lime, Brimstone, Tarre, old Swines grease, of each a like quantitie, boiled together, and with a little oile made in an ointment: they vse to rub it also with the Sote of a Caldron. Against many diseases both of Horses, and Bullockes, they vse the rote of the hearbe called blacke Ellebor, of some Bearfot, of others Setterwort, which they thrust in the brest of the beast, betwirte the flesh and the skinne, making a hole before with a bodkin. Against all diseases of horses, *Vegetius* commendeth this medecine as the chefest, Centory, Wormewode, Dogge Fenell, wilde Time, *Sagapen, Betony, Saxifrage, Aristolochia Rotunda*, take of eche alike, beate them small, and sifte them, and if the Horse haue an ache, giue it him with water, if he be ferme, with good strong Wine. The olde husbands would not suffer their horses to be let blood, but vppon great necessitie, least being vsed to it, if it should at any time be omitted, it should breed some disease: and therefore in very yong Horses, and such as be healthy, it is best not to let them blode but in the rofe of the mouth. For those that be come to their full age, you may let them blod before you put them to pasture, but beware you beare a steddy hande, and strike them not too deepe: Geldings you shall not nede to let blod, the Horses of *Barbary* (as they say) neuer ned any medicine.

EVPH. You haue spoken enough of Horses, it is time you say something of Asses.

Asses. *HIP.* It is greatly out of order, but since you will nedes haue me so to doe, I will not sticke with you to say what I can therein, that eche of you may doe the like in his charge. Asses are commonly kept, yet not to bee little set by, because of their sundry commodities, and the hardnesse of their feeding, for this poore beast contents himselfe with what meate so euer you giue him, Thistles, Bryers, Stalkes, Chaffe, wherefore euery countrey hath store, is good meate with him: besides, he

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may best abide the ill loking to of a negligent keeper, and able to sustaine blowes, labor, hunger, and thirst, being seldome, or neuer sicke, and therefore of al other cattel longest endureth: for being a beast nothing chargeable, he serueth for a number of necessary vses: in carrying of burdens, he is comparable to the Horse, he draweth the Cart (so the lode be not vnreasonable:) for grinding in the Mill he passeth all others, therefore in the countrey the Asse is most needefull for carrying of things to the market, and Corne to the Mill. In *Egypt* and *Barbary* (where the ground is very light) they haue also their vse in plowing: and the fine Ladies of the country do ride vpon Asses richely furnished: yea, they be very apt to be taught, so as at this day in *Alcayre* you shall haue them daunce very manerly, and keepe measure with their Musitian. *Varro* maketh mention of two sortes, one wilde, whereof in *Phrigia* and *Lycaonia* there are great store: the wild Asses that are tamed, are passing good, specially for breede, & they are easely broken: the other is tame, of which I meane to speake. The best are brought out of *Arcadia* (although *Varro* seemes to commend the breede of *Italy* for goodnesse.) He that will haue a breede of Asses, must haue the male & the female both of reasonable age, large bodied, sound, and of a good kind: the male must be at the least three yeere old, for from three, till they be tenne, they be fit for breeding: they bring forth their Coltes sometimes at two yeeres and a halfe, but three yeeres is the best age: the female goeth as long with her burden as the Mare, and dischargeth in all respectes as she doeth: but she will not very well retaine, except she be forced immediatly after the horsing to runne about, she seldome bringeth forth two. When she foaleth, she gets her into some darke place, and keepes her selfe from being seene. They will beare all their life time, which as (*Aristotle* saith) is thirtie yeeres: they are put to the horse a little before the tenth of June, and beare euery other yeere: they bring forth their Fole at the twelmoneth. While they bee with Fole: they must not bee greatly laboured, for hazarding their Fole: the male must neuer be idle, for he is as lecherous as the deuill, and by rest will ware naught. The colt is suffered to run with the damme the

first

first yere, & the next is gently tied vp with her, only in the night times: the third yære they are broken, according to their vse. The damme doth wonderfully loue her young so much, as shee will not sticke to come through the fire to it: but the water shee dare in no wise come neare, no not to touch it with her foote, neither will she drinke in any strange water, but where she is vsed to be watred, and so as she may goe & stand dry foote. They delight to be lodged in wide roomes, & are troubled with feare-full dreames in their sleepes, whereat they so pawe with their legges, ỹ if they lie nære any hard thing, they hurt their fæte: in drinking, they scarsely touch the water with their lippes (as it is thought) for feare of wetting their goodly eares, whose shadowes they see in their drinking: no beast can worse away with colde then this. If your Asses halt at any time, you shal thus remedy thẽ, wash al the foote w̃ warme water, & afterward make them clean with a sharp knife, which when you haue don, take old chamber lye, as hot as may be, & melt therein goates suet: or if you haue not ỹ, Dre tallow, & anoint al ỹ fæte til they be hole.

EVPH. They say, that betwirt an Asse, and a Mare, is gotten the moile, as a third kind, of two sundry kinds, neither resembling the father, nor the mother.

Moyles.

HIP. It is very true: as of the shee Asse, and the Horse, is engendred the shee moile, but altogether stubborne, and vnreasonable dul. Also of the Mare, & the wild Asse, being broken are bred moiles that runne passing swiftly, and are wonderful hard howfed, but rugged of their bodie, & mischieuous stomaked, yet easie to be handled: the mares for bræd, must not be vnder foure yæres, nor aboue ten: they are foled in the twelfth moneth, as Horses and Asses are (as *Aristotle* saith:) but *Columella* saith, their foling time is not before the 13. moneth. The female cõceaueth (as experience teacheth) assuredly after ỹ seuenth day: ỹ male doth neuer better horse, thẽ when he is most tired. She that conceaueth not before she hath cast her colts tæth, is taken to be barren, as she likewise ỹ takes not at ỹ first horsing. Those that are gotten betwirt a horse and an Asse in olde time, were called Meyards, & such as were brought forth betwirt an Asse & a Mare, they called moyles. The moyles themselues (they say)

say) doe neuer ingender: and if at any time they did, it was taken for monstrous, accounting the cause of their barrennesse, the contrarietie of their kinds: which matter a long time troubled both *Aristotle*, and the rest of the philosophers. Though *Aristotle* hath other where written, that moiles doth both ingender, and bring forth: and with him agreeth *Theophrastus*, affirming, that in *Capadocia* they do commonly bring forth, and ingender of themselues. The like doth *Varro*, and before him *Dionysius*, and *Mago* affirme, that the breeding of moyles in the countries of *Affyke*, is neither monstrous, nor geason, but as common as our breed of horses: but the moile is both fairer and better stomaked, that is begotten of an Asse, and a mare. The Stallion that you meane to haue for your race of moiles, must be as faire as you can get, hauing onely this regard, that hee bee large of bodie, bigge necked, broad, and strong ribbed, large, and brawnie brested, his thighes full of synowes, and his legs well knitte, of colour blacke, and spotted: for Asses (though they bee commonly dunne) yet that colour agreeth not well with a moile: some say, that what colour you would haue your moyle to be, with that coloured cloke you must couer your Asse. The Asse so proportioned (as I haue declared) that you meane to appoint for your Stallion, you must straightwaies take from his damme, and put him to some mare that hath a colt sucking of her: you shall easely deceiue the mare, by setting her in a darke place, remouing her owne colt from her, and putting to her in steede therof the Asses colt, which she will nurse as her owne. Afterwardes, when the mare hath been vsed to it a ten daies, she wil continually after that time giue it suck. The asse being in this order brought vp, will better acquaint him selfe with the Mare, sometimes though he be sucked onely with his owne damme, being brought vp when hee is yong amongst mares, will well enough keepe company with them (as *Columella* saith:) but our Asses are of themselues desirous enough of the Mares, that they needе not to be trained to the matter: for it is a wonderfull coltishe beast, & vnreasonably weapned. He must not be lesse then three yeeres old when he couereth your Mares, which must be in the Spring time, when you may wel

feede

fæd him with graſſe, and good ſtore of oates, and barly: neither muſt you put him to a yong mare, for if ſhe haue not bæne horſed before, ſhe wil ſo beat her woer, that ſhe wil make him like the worſt as long as he liueth: for remedy wherof, you muſt at ỹ firſt put to the mare a wilder aſſe, ỹ may woo her before, but not ſuffered to horſe her, & when you perceiue ỹ ſhe is Horſing, away with the raſkal, and put to your ſtallion. A place fit for this purpoſe, the country people (as *Columella* ſaith) were wont to haue, which they called a frame, or a brake, with two railes on both ſides, & a litle diſtance betwæne, ỹ the mare cannot ſtriue, nor turn from the horſe, the lower part enclоſed, and the Mare ſtanding lowe, ſo the Aſſe may the better leape her, hauing the vpper ground for his helpe, which when ſhe hath conceaued, & at the twelue months end brought forth, the yere after ſhe muſt be ſuffered to run emptie, that ſhe may the better bring vp her colte. The ſhe moile (being a twelue month old) muſt be taken from the dam, and let run vpon mountains, or wilde places, for the hardning of his hoofes, and the better enduring of labor, for the male is the better for burden, and the female the quicker & liuelier: both the kindes doth trauell wel, and till the ground, if the plowman be not vnreaſonable, or the ground ſo ſtiffe, as it requireth a drawght of oxen, or horſe. They wil leaue ſtriking and kicking, if you vſe to giue them wine (as *Plinie* reporteth) who likewiſe writeth, that a moile will liue fortie yeeres.

EVPH. Since you haue begun with trauelling beaſts, what can you ſay of the Camell.

Camels. *HIP.* The Camel is chæfly vſed in ỹ eaſt parts, which ſome ſuppoſe to be the ſeruiceableſt cattell for man that is, and as it were therevnto only framed: for he is bumbaſt vpon ỹ backe for bearing of burdens. Alſo he hath foure knees, wheras the horſe, the aſſe, and ſuch others haue but two: for his hinder legs bow forward as a mans knees doth, wherwith he knæleth to receiue his burden. There are two kinds of them, the *Bactrian* and the *Arabian*: the *Bactrian* haue two bunches vpon their backs, and the *Arabian* but one, & the other on their breſt to leane vpõ, both ſorts of them lacke their tæth aboue, as the bullocke doth: they al ſerue in thoſe countries for burden, & to cary men in ỹ wars:

they

they are as swifte as horses, but some a great deale more then others: neither will they breake their pace, nor carry more burdens then they are vsed to. They beare a naturall hatred to the horse: and can forbeare drinke for foure daies: he drinkes when he may, both for that is past, and to come, troubling the water before with his foot, otherwise he delighteth not in it: he is fed beside his pasture, and such things as he gettes in the Woode, with Dates, or barle, and salt: he engendreth backward, as the Elephantes, Tygers, Lions, Connies, and such other, whose instruments grow backeward: when they meane to go to rut, they seeke the secretest and desartest places that may be: neither may a man at any time come neare them, without great danger. They go with young a twelue moneth, and are meete for breede at three yeares olde, and after a yeare they conceaue again: they beare but one at once, as Elephants, and other great beasts doe: they giue milke till they be great. Againe (as *Aristotle* saith) *Didymus* in his bookes of husbandrie writeth, that the Camell hath a regard to his blood, as the horse hath, and lyeth neither with mother, nor sister. And the female Camell of *Bactria*, feeding vpon the Mountaines amongest the wilde Boares, is often times dreamed of the Boare, and conceaueth. Of the Boare and the shee Camell, is ingendered the Camell with two iompes vpon the backe, as the Moyle is of the Asse, and the Mare, and in diuers thinges resembleth his sire, as in brisled heares, strength, & not fainting in the mire, but going lustily through, and in carrying double so much as other Camelles, as the same authour saith. The females of them are spaide, to serue the better for the warres: they liue (as *Aristotle* saith) fiftie yeeres, others say a hundred yeeres, and are subiect to madnesse (as *Plinie* saith) there are a kinde of them called *Camaleopardi*, that haue the resemblance of two diuers beasts, the hoofes and hinder leggers like an Oxe, his forelegs and his head like the Camell, the necke like a horse, being flecked white and redde. *Strabo* saith, he is couered like a fallow Deare, straight necked, and hie, like an Ostrige, his head somthing higher then a Camels.

EVPHOR. I remember I haue seene the like beast for all the

the world in a peece of tapestry with blacke Moores, with their wiues and baggage vpon their backes, saue that they had their little hornes vppon their heades, like as some sheepe haue. I thinke *Heliodorus* in hys *Æthiopian* storie, did first describe this beast, but these outlandishe beastes wee meddle not much with.

HIP. Go to *EVPHORBVS*, let vs now see you discharge your part, according to your promise, and tell vs some parte of your cunning in keeping your cattell: for next to the Horse in worthinesse, commeth the Ore.

Bullocks. *EVPHOR.* Since it is so appointed, I am contented to shewe you what I can say touching my poore skill: and first, I may not suffer the horse to chalenge the cheefe place, when the olde writers and auncient people did alwaies giue the garland and cheefe praise to the Ore, as to a good plowman and faithfull seruant: for *Hesiodus*, a most ancient writer, and the grauest author of our profession affirmeth, that the family doth consist of the husbande, the wife, and the Ore. The selfe same by his authoritie doth *Aristotle* seeme to alleage in his Politickes, and in his Economickes, which beast was alwaies of that honor and estimation, that he was condemned in a great penalty, whosoeuer did kill him, being a fellow, and cheefe helper in our husbandry. By the worthines of this beast, many great things receiued their names of them: for of the number, beautie, and fertilitie of Heyfars, did Italy (as they saye) first take hys name, because *Hercules* pursued the noble Bull called *Italus*. This is the cheefe companion of man in his labours, and the trustie seruant of the goddesse *Ceres*: in many great things for the roialtie of the Ore, they derined their names from the ore, as in calling also the Grape *Bumammam*: in fine, *Iupiter* himselfe thought good to conuert into this shape his sweete darling *Europa*. Moreouer, of a rotten Steere are engendred the sweete Bees, the mothers of Hony, wherefore they were called of the Greekes (as *Varro* saith) Βυλίνας. The same *Varro* makes foure degrees in their age: the first of Calues, the seconde of Stereinges, the third Steeres, the fourth Oxen, the Steres: in the first, the Bulcalfe, and the Cowecalfe: the seconde, the Heyfar,

far, and the Steere: in the third and fourth, the Bull, and the Cowe: the barraine Cowe he calleth *Taurum*, the milch Cowe *Hordam*, from whence came the feasts called *Hordicalia*, because the milch kine were then sacrificed. The goodnesse of this beast is diuers, according to the diuersitie of the countrey: the best were counted in the olde time to be of the breede of *Albania*, *Campania*, and *Toscana*: at this day we take the best kind to be in Hungary, Burgundy, Friseland, Denmarke, and in England. Of bullocks, some are for the drawght, some for the staul, and some for the payle: to what purpose soeuer they serue, whether it be for labour, for milking, or for feeding, it is best alwaies to chuse such as are young, of lusty age, rather then those that are olde and barraine, the wordes of couenant in the olde time (as *Varro* saith) in selling of Bullocks, were these: do you warrant these Bullockes, or Steeres, that you sell to be sound, of a sound heard, and without fault? The Butchers that bie for slaughter, and such as bie for sacrifises, vse no worde of warrantise: and though some bullocks are chosen by their strength, some by the greatnes of their body, yet the best commonly haue these properties: large, well knit, and sound limmes, a long, a large, and deepe sided body, blacke horned, though in the colour there be no great matter, yet some mislike the white for their tendernesse, which when *Varro* consenteth, who would haue them broade foreheaded, great eyed and blacke, his eares rough and heary, his chawes to be large and wide, his lippes blackish, his necke well brauned, and thicke, his dewlappes large, hanging downe from his necke to his knees, his shoulders broade, his hide not hard, or stubborne in feeling, his belly deape, his legges well sette, ful of synowes, and straight, rather short then long, the better to sustaine the weight of his body, his knees streight and great, his feete one farre from the other, not broad, nor turning in, but easely spreading, the heare of all his bodie thicke and short, his tayle long, and bigge heared. *Palladius* thinketh the best time for bying of drawght Oxen, to bee in March, when being bare, they cannot easely hide their faults, by the fraude of the Seller, nor by reason of their weakenesse bee to stubborne to bee handled. It is best to bie them of your

neighbour

neighbour, leaſt the change of ayre and ſoile hurt them: for the Bullock that is brought vp neare home, is better then the ſtranger, becauſe he is neither troubled with change of ayre, water, nor paſture: if you can not haue them neare you, bye them from ſome like country, or rather from a harder, and be well aſſured that you bye them euen matched, leſt in their labor, the ſtronger ſpoyle the weaker. Loke beſides that they be gentill, skilfull in their labour, fearefull of the goade, and the driuer, not dreading any water, or bridge: great feeders, but ſoftly, and not ouerhaſtily: for ſuch do beſt digeſt their meate. In chooſing of Bulles, or Kine, the very like ſignes are to be required, that the Bull differeth from the Ore, in that he hath a more frowning and fierce loke, ſhorter hornes, greater, and thicker neck ſo bigge, as it ſeemes the greateſt part of his bodie, his belly ſomething gaunter, and meeter for Bulling of Kine. The Bull before he be ſuffered to goe with the Kine, muſt be well fedde with graſſe, chaffe, or hay, and kept ſeuerally by himſelfe, neyther muſt he goe to the Cowe, till the tenth of June. *Varro* woulde not ſuffer him before the riſing of the *Lira*: but *Ariſtotle* woulde haue him all the reddring time, to go in paſture with the kine. The cowe likewiſe would be hie of ſtature, and long bodied, hauing great vdders, broade foreheade, faire hornes, and ſmoth, and all other tokens almoſt that is required in the Bull; ſpecially to be yong: for when they paſſe twelue yeres olde, they are not good for breede, but they liue many times farre longer if their paſture be good, & they kept from diſeaſes. The olde Cowe giueth more milke then the yong, according to the countrey people prouerbes, olde Kine, more milke, yong hennes more egges. Againe, vnder three yeres olde, you may not ſuffer them to go to Bull: if they chaunce to be with Calfe before, you muſt put the Calfe from them, and milke them for three daies after, leaſt their vdders be ſore, after wardes forbeare milking. *Plinie* writeth, that at a yere olde they be fruitefull, but the breede will be little, as it happeneth in all timely ingenderinges. You muſt euerie yere in theſe beaſtes (as in all other) for your ſtocke, that the olde that be barraine, or vnmeete for breeding, may be put away, ſold, or remoued to

the

the Plowe: for when they be barraine (as *Columella* saith) they will labour as well as Oxen, by reason they are dried vp, but we vse commonly to fatte them: their age is knowen by the knottes and circles of their hornes, which *Plinie* marketh likewise in Goates. The time for going to Bull, some take to be best in the midst of the spring: *Palladius* would haue it in July, for so in the twelfth moneth she shal Calue, for so long she goeth with Calfe (as the common people say) a Cowe and a Queene haue both one time. In many places they desire to haue their Cowes goe to Bull a thirtie or fortie daies after the tenth of June, that they may calue in March, or Aprill: that they would haue much milke, so order the matter, as their Kine goe to Bull from the springe, to winter, wherby they alwaies milke some: at once bulling she conceaueth, if she chaunce to faile, she goeth to Bull againe with in twentie daies after: some say, if so be the Bull come downe on the left side of the cowe, it wil be a Cowe Calfe, if on the right side, a Bull Calfe. The Grecians affirme, that if you will haue a bull calfe, you must knitte the right stone of the Bull, and for a Cowe Calfe, the left: *Varro* saith, that if you put the Cowe to the Bull immediatly after gelding, she conceaueth: *Columella* affirmeth fiftene Kine to be yenough for on Bull. I thinke he will well yenough serue twentie Kine, if he be such a Bull as I described: if you haue good store of pasture, you may let them goe to Bull euery yeere, but you must beware your Kine be not to fattte, for that will hinder their being with Calfe. The Cowe should when she is reddring, haue but short pasture, and the Bull his belly full: so shall neither she be to fatt, nor he vnlusty. If the cowe will not take the Bull, you must stampe sea Onyons in water, and rubbe her vnder the taile with it: if the Bull be not lusty enough about his businesse, take the pezel of a Stagge, burne it, and make it in pouder, and with a little wine and the pouder, bathe his stones, and his pezell withall, which wil serue for the like purpose in all other beastes (as *Quintillian* saith) his courage is also stirred vp by the like odours that you speake of for your horse. A Bull ought not to leap the Cowe aboue twise in a day as some thinke, but we finde by experience, that he may

oftner. In some places they haue common bulles, and common Boares to euery towne: a Bull will ware furious at the sight of any redde thing, as the Elephant, and the Lyon, which cannot in no wyse abide the sight of any white thing. A Cowe wyll gyue sucke to a straunge Calfe, but let not the calues lie wyth them in the night, for feare of ouerlaying them. Some weane them at the first, and suckleth them wyth Wylke, or Whay, hauing a little Branne in it, or Flowre, wherewith they bring them vppe, till they bee able to fede. Whether you meane to reare them for breede, labour, or feeding, you must let them want no store of good pasture: for though they bee of neuer so great a breede, yet if their pasture bee scantie, they wyll neuer come to their full growth: for pasture makes the beast (as the Countrey people saye.) *Mago*, and the olde husbandes, woulde haue you to gelde them while they be verye yong, which order wee like wise obserue in cutting of them: and in the Spring, or at the fall of the leafe, when they be three moneths olde, or there about, wee vse to gelde the Bull Calues, and spay the Cowe calues, sowing vppe the wounde, and annointing it with fresh butter. *Columella* woulde not haue them cut, but their stones broken by little and little with an instrument, which kinde of gelding he best liketh, because in the little yong ones, it is done without bleeding: for when they be something growen vp, it is better to cut them at two yeere olde, then at a yeere olde, which must be done in the spring, or at the fall of the leafe, the Mone being in the wane: you must tie vp the Calfe to a frame, and before you cut him, you must fasten about the synows, wherby the stones hang, a couple of small stickes like a paire of tonges, and taking holde therwith, cut away the stones, so as a little of the vpper parts of thē may remaine with the foresaid synows: for by this meanes you shall not hazard the beast by ouermuch bleeding, neither is his stomacke quite taken away, but hath something of the father remaining, and yet loseth his abilitie of ingendring. Notwithstanding, if you suffer him immediately vppon thys newe cutting to go to the Cowe, it is certayne hee may get a Calfe, but let him not so doe, for

feare

feare of bléeding to death. The wounde muſt be annoynted with the Aſhes of Vines, and Lytharge, and he muſt not be ſuffered the firſt day to drinke, but nouriſhed with a little meat: three daies after he muſt be dieted, according to his feeblenes, with greene bowes, and ſweete graſſe cut for him, and loked to, that he drinke not too much: and if you will, you may annoint the ſore for three daies with Tarre, and a little Aſhes, and Dile, to heale him the ſoner, and to keepe the place from flyes. You muſt vſe them while they be yet young, to ſuffer to be handled, and ſtroked, and tied vp to the Manger, that when they ſhould come to be broken, they may be handled with more eaſe, and leſſe danger: but *Columella* forbiddes you to meddle with the breaking, or labouring of them, before three yeere old, and after fiue: for the one is to ſoone, the other to late. Thoſe that you haue taken vp wilde, and be well framed, and proportioned, according to my paterne, you ſhall handle and breake in this ſort. Firſt of all, ſee that you haue a large roome, where the breaker may eaſely goe vp and downe, and out at his pleaſure, without any danger. Before the ſtable, you muſt haue a faire fielde, that the Steeres may haue libertie enough, and not be feard, or haltred, with trees, or buſſhes. In the ſtable, you muſt haue certaine ſtalles, or bordes, yoke wiſe ſet vp, a ſeuen foote from the ground, to which the Steeres may be tied: this done, chooſe you a faire day for the purpoſe, and taking them vp, bring them into the ſtable: and if they be vnreaſonable wild and curſt, let them ſtand tied a day and a night without any meate, to tame them withall: afterwardes let him that keepes them, offer them a little meate, not ſidewaies, or behinde, but before coying them al the while, and ſpeaking gently to them, ſtroking their backes, and their moſeis, ſprinckling them with a little ſweete wine, taking good heede, that they ſtrike him neither with head, nor with heele: for if he once get that tricke, he will neuer leaue it. Thus being a little acquainted with him, you ſhall rubbe his mouth with Salt, and let downe into his throte certaine lumpes of ſalt tallowe, and powring after a quart of good wine, which will make him in three daies, as good a fellowe as you woulde wiſhe him to bee.

Some vse to yoke them together, & let them drawe some light thing, or plowe in a light plowed ground, that their labor hurte not their neckes. The rediest way of breaking them, is to yoke them with an olde Ore, that may easely instruct them: if hee happen to lie downe in the furrowe, doe neither beate him, nor feare him, but binde his feete together, and let him lie, that hee may neither sturre, nor fede: which being well punished with hunger, and thirst, will teach him to leaue that sullen tricke. The feeding of this kinde of cattel is diuers, according to the diuersitie of Countries: if there bee store of good pasture in the Countrey, there is no foode to that: in Countries where wanteth pasture, and specially in Winter, hee must bee kept in the Stal, and fed with such fodder as the countrey yeldes. Where there are Tares to bee had, it is the best feeding for them: and Hay is very good, Chaffe, and Colestalkes with Chaffe and Hay, and chopt strawe sodde together in water, is very good feeding for Winter. In some places, they fede altogether with newe thrashed strawe: in many places they giue them Lupines steeped in water, or Chiches, or Peson, mingled with Chaffe: besides the branches and leaues of Vines, the greene branches of Elme, Ashe, Poplar, and Holme, in winter, when other greene bowes faile, the Figge Tree will serue, or the brousing of Okes, and Holly. Oxen are soone fatte in good pasture, and with Wheate, Rapes, Apples, and Radishe: Oxen, or Kine, will be passing fatte, where there wanteth pasture, by giuing them Meale mixt with Wheate, Chaffe, and Rapes, or Graines. They will ware the soner fatte, in washing them with warme water, or (as *Plinie* saith) by cutting their skinnes, and blowing in winde to their bellies with a reede. *Sotion* teacheth that they will be fatte, if when they are taken from pasture, you giue them the first day Colworts chopt and steeped in sharpe Vineger, and afterwardes Chaffe, being well cleaned, and mingled with Wheat branne, for the space of fiue or sixe daies, feeding them after with good store of fodder: in Winter you must fede them at the first Cockcrowing, and againe when the daye begins to breake: in Sommer first at the breaking of the daye, then at noone, and at night: in Sommer

you

you must water them twise a day, three houres afore none, and three houres after: in winter, once a day with warme water, which is also thought to be good for fruitfulnesse: and therefore the Lakes that are filled with Raine water, are good for them. This kind of cattell desireth not cleane, or faire water, but foule and puddled: yet it were better to giue them faire water. Also, you must prouide them of warme pasture for the winter, and in sommer, very cole: chiefly Mountaines where they may browse vpon the bushes, and picke vp a good liuing among the Woods: but in lowe groundes and neare the Riuer, Oxen are sooner fatted, and Kine giue a greater quantitie of Milke. In Sommer, they lie abroade all the nightes in many places: yea, in England you shall haue them fodred abroad all the Winter. Though they be able to abide colde, yet must you prouide them of large stalles, for the succouring of such as be great with Calfe. Your stables, or Drstals, must stand dry, and be well floored, either with stone, graucll, or sand: the stone will suffer no water to abide vpon it, the other wil soone drinke it vp and dry it: both sortes must be laied slope, that the water may run away, for rotting the groundsels, and marring their houses. Let them open toward the South, so shall they be the drier, and the warmer: notwithstanding, let your windowes open North and East, which being shutte in Winter, and open in Sommer, may giue a healthful aire. In fine, as neare as can be, let the houses be neither too hotte, nor too cold, and as dry as may be: *Columella* would haue two Drehouses, one for the winter, the other for the sommer both vncouered, but well and high walled, for keeping out of wilde beastes. The stals would be eight foote wide, that they may haue rome enough to lye in, that the Kine great with Calfe hurt not one the other, nor the stronger Drewrong the weaker: and that there may be rome for their keepers to come about them, and for yoking them. *Vitruuius* would haue the Drehouse open towardes the East, and to be neare the fire: for fire is naturally beneficiall to cattell, both for the drying vp of the infectiue dampes, and the keeping of the cattell warme. Besides, by seeing of the fire, they are made gentler, and by the heate thereof, what cold they haue taken in the pastures, is expelled, and diuers inward diseases cu-

red. The houses must be seuered with diuers roomes, enclosed and racked, the racke must stand no higher then the Ore may easily reach, and must haue such pertitions, as one beast beguile not the other, whereto they must be well haltred and tied, for hurting one the other: *Cato* would haue the pertitions lettised. Moreouer, it is to no purpose to fede them wel, except you also loke to the keping of them in health, and sound, and therefore whether they be in house, or abroade, you must allwaies haue a speciall regard vnto them, and to ouerloke them in the night, specially, if there be any kine amongest them with Calfe. And though it be needefull at all times to ouersee them, both morning and euening, yet most needefull is it of all other times, to see to them in the spring, when you first put them to pasture: for at that time, by reason of their change of diet, both Oxen, Kine, and Hayfarres, are most in danger of sickneſſe: in Winter againe to loke to them, that they be not, for sparing of charges, kept so poore, as they be vtterly spoiled. And therefore you must spare no litter, specially when they come from labour, to rubbe them, and dry them, stroking them with your handes, and raising the hide from the flesh, which will do them great good. In comming from worke, or out of the pasture, you must wash their feete wel with water, before you bring them into the house, that the durt and filth cleauing to them, breede no diseases, nor soften their hoofes. Beware of too much cold, or heate, for too much of either, filleth them with diseases. You must take heede they be not chafte, nor chafed vp and downe, specially in hotte weather, for that bringeth them to a Feauer, or causeth them to haue a Flixe. Take heede also, that there come neither Swine, nor Poultry neare their stalles, for both of them with their dounging poisoneth the beast. The dounging of a sicke Swine doth breede the pestilence, or murraine amongest cattell. You must away with all manner of carrions, and bury them wel for infecting your cattell. If so be the murraine chance to come amongst them, you must presently change the ayre, and seuer your Cattell farre a sunder in diuers pastures, keping the sound from the sicke, that they be not infected, not suffering them either to fede together, or drinke together. The Pestilence, or Murraine, is a common name, but there are

The Murraine and his diuers kindes.

diuers

diuers kindes of it: in some Murraines, the cattell driuell, and runne both at the nose and mouth, in others again they be dry, and fal away more and more: somtimes it comes in the ioints, and causeth them to halt before, or behinde, sometime in their kidnes, and appeareth by the weakneſſe of their hinder parts, wherein they ſeeme to haue great paine in their loines. An other kinde there is, that riſeth like a Farcine, with Pimples ouer al the body, now appearing, and preſently vaniſhing, and comming out in a newe place. An other ſort, betwixt the hide and the fleſh, wherein the humor ſweateth out in diuers parts of the body. Sometime it is like a leproſie, when all the ſkinne is full of little pimples, and ſometime a kinde of madneſſe, wherin they neither heare, nor ſee ſo well as they were wont, though they looke faire and fatte and luſty enough. Euery one of theſe kindes, are contagious and infectiue, and therefore as ſoone as you perceaue them infected, you muſt preſently put them a ſunder for infecting the whole ſtock, leaſt you impute that to the wrath of GOD (as many fooles doe) which happeneth through your owne beaſtlineſſe, and negligence. The common remedy (as *Columella* ſaith) is the rootes of *Angellica*, and ſea Thiſtell mingled with Fenell ſeede, and with new boiled Wine, Wheat flowre, and hotte water to be ſprinckled vpon them. The common people, when they perceiue either their Horſe, or Bullock ſick, or any other cattel elſe, they vſe to take the roote of blacke Ellebor, called of ſome *Conſiligo*, of others Bearefoote, and for a Bullocke, to thruſt it in the Dewlappe, for a Horſe, in the breſt, for Swine, or Sheepe, through the eare, making a hole with a bodkin, and thruſting the roote preſently through, which the newe wound holdeth faſt that it can not fall out, whereunto all the whole force of the poyſon doth ſtraight waies gather, and runneth out in filthy water. Perfumes in this caſe (as *Vegetius* teacheth) doe much good, as Brymſtone, vnſlected Lime, Garlike, wilde Mariorum, and Coriander ſeede, laied vppon the coles, and the Oxen ſo held, as they may receiue the ſmoke by their mouth & noſe, that it may fill their brain, and their whole body with a healthful aire. It is good alſo thus to perfume the whole body, both for the health of the ſicke, and preſeruing of the whole. Before I proceede any farther, I will ſet you downe what kinde of Spices, and what Setterwoort.

quantitie you ought alwayes to haue in a readinesse for your cattel. You must haue one pound of Fenicricke, halfe a pound of Liquerisse, one pound of Graines, Turmericke, halfe a pound, or a quarterne of Bay berries, one pound of long Pepper, halfe a pound of Treacle of Geau, a pound of Anisseed, halfe a pound of Comin, half a pound of Madder, Ortment, half a pound. The hearbe whose rote you must vse (as I said before) groweth in many places in the woods: it was once brought vnto mee by chaunce from Darndall in Sussex, by one Richarde Andrewes, a good painfull searcher out of such thinges: the picture wherof, I haue here set before you, for your better knowledge. For beside hys present remedying of cattell, he serueth against diuers diseases in man, specially for the Quartane, as the learned *Mathiolus* hath in his description of Plants mencioned. To returne to my cattell: if they want their digestion, or chawe not Cud, which diseases is perceiued by often belching, and noyse in the belly, with forbearing of their meate, dulnesse of their eies, and not licking of themselues. Take a handful of Pelitory of Spaine, as much of Hearbgrase, as much of Fetherfew, Sage, Horehounde, and Baysalt, three pintes of very strong newe drinke: seeth them together three or foure walleps, and giue it him bludwarme in the morning, not suffering him to drinke, till the afternoone: if you neglect this disease, so that hee bee pained in the belly, and full of greefe, he will grone and neuer stand stil in one place. For remedy wherof, you shal bind his tayle close by the Rumpe, as straite as may bee, and giue him a quarte of Wine, wyth a pinte of the purest Oyle:



For Cruditie.

and

and after driue him a pace for the ſpace of a mile and a halfe: annoint your hande with greaſe, and rake him, afterwardes, make him runne againe: ſome vſe to let him bloud in the taile, within a handfull of the rumpe. There is a diſeaſe which they call the Wolfe, others the Taile, which is perceiued by the looſeneſſe or ſoftneſſe betwixt the iointes: take the Taile, and feele betwixt euery ioint, and where the ioynt ſeemeth to be a ſunder, or is ſoft and not cloſe as the other iointes, there take and ſlitte him the longeſt way vnder the Taile, about two inches long, and lay in the wound Salt, Swte, and Garlike, and binde it faſt with a clout about it. The Collick, or paine in the belly, is put away in the beholding of Geeſe in the water, ſpecially Duckes (as you ſaid before) of Horſes: for the ſight of the Ducke, as *Vegetius* and *Columella* ſaye, is a preſent remedie to this beaſt. For the Flix, or the Laſke, which in ſom places they call the Ray, take Sloes and dry them in pouder, and giue it them to drinke: if it be the bloody Flixe, the old fellowes were wont to cure it in this ſort. They ſuffred not the beaſt to drink in three daies, and kept him faſting the firſt day, and gaue him the ſtones of Reazins or Grapes, dryed and made in pouder two pounds, with a quart of ſharpe tarte Wine, and ſuffered them to drinke no other drinke, and made them eate the browſing of wilde Oliue trees, and Paſtyre trees: and if they mended not with this, they burnt them in the forehead to the very braine pan, and cut off their eares. The woundes, till they were whole, they waſhed with Orpiſſe: but the cut parts were to bee healed with Oyle and Pitch. If your Calues haue the Ray or Laſke, take ſweete milke, and put therein the Rennet of a Calfe, make it no thicker but as the Calfe may well drinke it, and giue it him lukewarme. If your Bullocke haue the Cough, and if it be but beginning, giue him a pint of Barly-meale with the yolke of an Egge, the Reazins boiled in ſweet Wine and ſtrained, a pint: mingle them together and giue it him faſting. Alſo Graines beaten and mingled with Floure, fried Beanes, and meale of Lentyls, all ſtirred together, and giuen him in a maſh. *Columella* would haue you giue them Graſſe chopt, and mingled with Beanes that are but a little broken in the Mill, and Lentils ſmall ground, and mingled with water. The old Cough they cured with two pound of Hyſope,

The taile.

The Flix.

Laske in Calues.

The Cough.

ſope, ſteeped in three pintes of Water, and mingled with Floure, which they made him to ſwallowe, and afterwards powred into him the water wherein Hyſope had been ſodden, alſo Peaſon, with Barly water and ſodden Hony, when they had the Cough, and Conſumption of the Lonnges. To keepe them aliue, they vſed to burne the roote of a Haſel, and to thruſt it through their eares, giuing them to drink a pint of the iuice of Lekes, with the like meaſure of Oyle and Wine. For the Cough of the Lonnges, I vſe to giue them long Pepper, Graines, Fenegreke, Bays, Anniſeede, Oxtment balles, Turmericke, and Madder, beating them all together, and ſething them in good Ale grounes. If your Calues haue the Cough, take Sentury, and beate it to powder, and giue it them. If they haue the Feuer or Ague, you ſhall perceiue it by the watring, of their eies, the heauineſſe of their head, the driueling at the mouth, beating of the vaines, and heate of the whole body: let them faſt one day, the nert day let them blood a little betimes in the morning in the taile, after an houre giue them a thirty little ſtalkes of Colworts ſodde in Oyle, Water, and Salt, which muſt be powred faſting into them, fiue daies together. Beſide, you may giue them the toppes of Olyue trees, Lentils, or any tender brutinges, or branches of Vines, and wipe their mouthes with a Spunge, giuing them colde water thrise a day. The blood falling downe into the legs, cauſeth them (as *Vegetius* ſaith) to halt, which as ſoone as you perceaue, you muſt ſtraightwaies loke vpon his hoofes, the heate whereof will declare his greefe, beſide, he will ſcarſe ſuffer you to touch it. But if ſo be the blood be yet aboue the hoofe in the legges, you ſhall diſſolue it with good rubbing, or if not with that, with Scarifiyng, or Pouncing the ſkinne. If it be in the foote, open it a little with a knife betweene the two clawes, and laye to the ſore, cloutes dipped in Vineger and Salt, making him a ſhoe of Brome, and be well ware he come not into any water, but ſtand dry. This blood, if it be not let out, will breede to matter, which will be long ere it heale: if it be opened at the firſt with a knife, and made cleane, and after cloutes dipped in Water, Salt, and Oyle laide to it, and at the laſt annointed with olde Swines greaſe, and Goates ſuet boiled together, it wyll quickly be whole. This diſeaſe, as I take it, the country people

The Feauer.

Halting.

call

call the Fowle, or the Wilpe, which they sometime cure with drawing a rope of strawe, or heare through the Cleele, till it bleede, or by searing of it with a hotte iron. If the blood be in the lower part of the Howfe, the vttermost part of the Cle is pared to the quicke, and so the blood let out, and after, the foote wrapped with clowtes and shoed with Brome, you must open the howfe in the middest, except the matter be ripe. If hee halte by reason of the Crampe, or paine of the sinowes, you shall rub his knees, thighes, and legges, with Salt and Oyle, till hee bee whole. If his knees or iointes be swolen, they must bee bathed with warme Vineger and Linseede, or Mylet beaten and laid to it, with water and Honie. Also Spunges wette in hotte water, and dried againe, and annointed with Hony, are very good to be laid to the knees: if vnder the swelling there bee any humor, Leauen, or Barly meale sodde in water and Hony, or sweete Wine, must be laid to it: and when it is ripe it must bee opened with a knife, and healed as before. All greefes generally, if they bee not broken, must be dissolued whilest they are newe, with bathes and fomentations: and if they be old, they must be burned, and the burning annointed with Butter, or Goates suet. If he haue hurt his heele, or his howfe, stone Pitch, Brimstone, and greasie Woll, must be burnt vpon the sore with a hot iron. The like must be done when he is hurt with a Stub, a Thorne, or a Naile, being first plucked out, or if it be verie deepe, it must be opened wide with a knife, and so handled: for kibed heeles, take and cast him, and binde his legges fast together, then take your knife, and cut it out as nie as you can, and let him bleed well: then take a peniworth of Verdegrease, and the yolke of an Egge, and temper them well together, and binde them close to the place, and he shall heale. If the Vdder of your Kine do swell, you shal bathe them with Iuie sodden in stale Beere, or Ale, and smoke them with Hony Coames, and Camomell. If the Bullockes feete be neare worne, and surbated, washe them in Ore pysse warmed, and kindling a fewe twigges or sprayes, when the flame is done, cause him to stand vpon the hotte imbers, and annoint his hornes with Tar, and Oyle, or Hogges grease. They will neuer lightly halt, if after they haue bin laboured, their feet be washed wel with cold water, and afterwards their pasterns, and the places betweene the

Clees,

Skabbes.

Ties be rubbed with old Swines greafe. The ſkabs or manginelle, is gotten away with rubbing them with ſtamped Garlicke, which alſo cureth the biting of a madde Dogge: beſides, Pentriall and Brimſtone, beaten and boiled with Dyle, Vineger, and water, and after whilſt it is warme, a little Alom made in powder and caſt into it, doth cure the ſkabbe, being annointed in the ſunſhine. Other vſe to annoint them with butter and bullockes piſſe: and ſome againe take Rozen, tarre, and Wine, and vſe it as a Pulteſſe. Hidebound, is when the ſkin ſo ſtickes to his backe, that you can not take it vp from the ribbes, which happeneth by ſuffering him to take colde after his ſwette, or if after his labour he be wette with raine, or brought lowe with ſickneſſe: which, becauſe it is very dangerous, you muſt looke, that when they come from their labour, and are hot, you ſprinkle them with Wine, and giue them ſome peeces of fatte or ſuet. But if they be already Hidebound, it is good you ſeeth ſome Bay leaues, and with the warme decoction thereof, to bath his backe, and to rubbe him all ouer with Wine and Dyle mingled together, and to lift and plucke vp the ſkinne round about, and that abroad while the ſunne ſhineth. If his bleeding ſtench not after the cutting of the vaine, the remedy is to lay his own doung to the place. A common medicine for all diſeaſes as *Vegetius* reporteth is this: the rote of a ſea Onion, the rote of the Popler, and the common Salte, of eth a ſufficient quantitie, lay them in water, and giue it your catell to drinke till they be whole: which alſo being giuen in ẏ beginning of the ſpring, for the ſpace of fourteene daies, preſerueth them from all ſickneſſe. Now that you haue heard in what ſort the olde huſbands did remedy the diſeaſes in their cattell, I ſhall breefely declare vnto you the remedies that are obſerued in ſundry diſeaſes at this day, whereof I haue chopt in ſome amongſt the medecines before. First for ẏ murraine: it beginneth at the firſt in ẏ throt, and ſwelleth in the head, and rotleth with much noiſe in the throte, wherby it is perceiued: take a quart of newe Wylke, halfe a peniworth of Butter, a peniworth of Garlicke, two peniworth of Engliſh ſaffron, two peniworth of Cinamon, two peniworth of turmericke, a quantitie of Hearbegrace, a quantitie of bittonie, mingle them altogether, & giue it him warme:

Hide-bound.

For the murraine.

then

then take an alle, and thrust the toppe of his nose vpward, take but the very toppe to thrust through, and not to the headward, then let him blood in the necke almost a pottell, if hée bée able: saue the blode, and let it stande, if it change, he may liue, if not, he dieth. Another for the same. Where he swelleth about the iawes and vp to the eares, open him vnder the iawes to the rot of the tong, and get in your finger, and open it a good widenes, then take a good péece of rustie Bacon, and a handfull of Raggewort, stampe them well togither, and fill the hole full with it: then let him blode at the nose, and the tong. A drinke for the same. Take Tansie, Yearbegrace, Longwort, Hisope, Time, of each a like quantitie, halfe a handfull, stampe them, and take a quart of good allegroundes, and seeth them a wallope, or two: take and straine it, and put the licour into a vessell, put thervnto a peniworth of Graines, a peniworth of long Pepper, a peniworth of Ortment, and a peniworth of Fenegreke giue it the beast luke warm. The sicknes of the Longs is perceiued if the Dewlap be harde closed together very farre vppe: also in hard féeling the hide vpon the backe, it cracketh or snappeth much: also a short husking, and thrusting out the tong withall: if it be much perished on the left side, hée is vncureable, which you shall perceiue by the Hyde, which will sticke fast on that side, and likewise the Dewlappe, if hée be farre gone, he will grone much. The remedie for this disease, is to take long pepper a peniworth, round pepper as much, of graines two peniworth, of Turmericke two peniworth, of fenegreke two peniworth, of Mace as much, Cloues a peniworth, of Anisséedes a peniworth, of Madder two peniworth, of Triacle of Geane, the vtter rine of Wallnuts dried, and made in powder, Juniper berries powdred, Dre Longworth, Fetherfewe, Yearbgrace, Tansie, Horse Mintes, Bay berries powdred, a peniworth of Garlicke, a quart of Chamberly, a pinte of Salte, a quantitie of butter. Setter him before, or immediatly after this medicine giuen. The order of Settring a Bullocke is this, take Setterwort, otherwise called Bearfote, and Garlicke like quantitie, péele and stampe the Garlicke, & pare the Setterwort cleane, and wrappe them well in Butter, then cut the Dewlappe two

For the Loonges.

Setting of cattell.

inches

inches behinde the sticking place, to the brestwarde, and cut it alongstwise about two or three inches, and pull the Dewlappe with thy finger, or with a sticke, round about one side from the other, as much as you can possible. Then put the Setterwort, Garlike, and Butter, as much as thou canst well put in, and thus do on both sides the Dewlappe, then rowle him so that the string may goe through both holes on both sides the Dewlappe, alwaies remembring to cutte the Dewlappe a handbroad, or aboue the bottome, and in any wise to rent him to the bottome, before you put in the medicine. The third day after the Settring loke to the, open the wounde, and let out the corruption (if it be come downe) if not, put in more of the medicine, and turne the rowle: and if it be much swolen and hard, and will not rote, take a hotte iron, and take vp parte of the soare, the skinne, and the flesshe, in such place as thou seest most conuenient, so as it come not to the bone, and thrust the iron through on the one side, and on the other, or once right vnder, if the swelling be right beneath, and tarre him well if the flies be busie. Which flies if they chaunce to get into the soare, take a cloth or Towell, and lappe it about a sticke, and put it into skalding hotte Tarre, and so among the Waggotes, searching euery corner well. After you haue pearsed him with the hotte iron, remember to take a little sticke, and Towe, and dipping it in Sallet Oyle, or Wool Oyle, to rub the hole where the iron passed. The sickneſſe of the Gall, is knowen by the running eies, if he haue much yellowe eareware, it is also discerned by the browne yellowes vnder the vpper lippe: the cure is this. Take Chamberlie, good Ale groundes, or Beere groundes, hard Soote in powder, Gallwort, beasts Longwort, Planten leaues, Hearbgrace, Hempseede, or Hemp toppes, Garlicke stamped, a penilworth of *Aqua vite*, for a great Bullocke, take almost a quarte of this medicine, for a small Bullocke, lesse: when he hath drunke, take Salt, Lome of the wall, and leauened bread, and rubbe well his tong, and all the rofe of his mouth: then wash his backe, and chafe it well with Chamberlie lukewarme: gather all these Hearbes in Sommer, and kæpe them, and make them in powder. This medicine serueth

The Gal, or Yellows.

like

likewise for the Lounges. If a Bullocke be diseased in the Lyuer, hee complaineth first in the legges, which will so greeue him, that hee shall not bee well able to stande, though hee bee in good liking: the remedie is this. Take a quart of good Ale (if it may bee gotten) if not, take Beere, put therein Liuerwort, a good handful, Wormwood as much, a peniworth of Garlicke, halfe a peniworth of Madder, a peniworth of round Pepper, as much long Pepper, a peniworth of Cloues and Mace, a peniworth of Triacle, mingle them together, the hearbes being powdred, and giue the beast a drinke lukewarme. The signes of the Blaine, are these: swelling about the face & the eie, and somewhat in the bodie: if it bee in the bodie, it swelleth much there, the onely remedy is. Take and search him in the mouth, if you perceiue blisters vnder the rootes of the tong, or other place there abouts, then cut them to the bottome, and let them out, and rubbe the place with Salt: search him also for the bodie at the fundament, by the arme or hand of some yong stripling: and when his arme is in as farre as he can, let him turne his hand vpward, and feele for the blaines, or blisters, & breake them with his nailes, pulling them quite out: see that hee annoint his hand well with Grease or Sope. There is a disease called the Sprenges, wherin he will smite his head backward to hys belly, and stampe with his legges: you must put your hand into his fundament, as far as you can pull out the doung, then shall you finde blood, pull the blood quite out, and take a good handfull of Bay Salt, and put it in at twise, as far as you can: if hee haue this disease, he will swel in the body, and couet much to doung. If he haue the Staggers, he wil loke very red about the eies, and cast his head backward: take the fourth part of an ounce of Pepper, brose it, and take halfe a pint of sharpe Vineger warmed blood warme, and powre it into his Nosethrils, and hold his head well vpward, and let him blood at the Nose. If your Bullocke turne round, and haue the Dasye, you shal take him by the head, and feele vpon his forehead, and you shall feele it with your thumbe: cut the skinne crosse wise right in the place, and wipe away the blood as it doth encrease with a clout, and binde a cloth ouer his heade, and keepe it warme.

For the Liuer.

The Blaine.

The Sprenges

The Staggers.

The Dasie.

If

Pissing of blood. If your Oxen pisse blood, kæpe them foure and twentie houres from water, & then geue to euery one a little dishefull of rennet crudes in a quarte of milke, let them not drinke in four houres after. There sometime runneth a blod vpon the backe of a bullocke, which will make him draw his legges after him, and goe as if he were swaide in the Chine: cut of a ioynt, or two of his taile, and let him bleede: if he bleede to much, knit his taile, or seare it. If he haue the Panties he will pant much, and shake in the Flanke, & sometime shake downe: geue him a little rennet, with Soote and Chamberley. If he swell of the taint, or Stingworme, geue him vrine, selt, and tryacle to drinke: if he be hidebound, stampe the leaues of Floredelise, straine them, and geue the beast to drinke: if he chaunce to haue a stroke in the eye, take the iuyce of Smallege, Fenell, and the whit of an Egge. The Gargyse, is a swelling beside the eye vppon the bone, like a botch, or a byle: if your Bullockes haue it, cut of rounde about it peeces, of skinne as broade, then cut also round about those peeces, one narrowe lap of the skinne, which will kæpe the disease from his lippes, for if it come to his lippes, it is vncurable. Then take Chamberly, and Salte, and sæth them to gether, and washe the places where the skinne is cut of, and washe it therewith euening and morning, till the swelling be gone, skraping of the skabes, and other filth at euery dressing to the quicke, till the swelling be gone, not spæring it, so long as it watreth, and runneth: when the swelling is cleane gone, take Narualle and Hony, boyled together blode warme, and annoint al the saide places, which will both heale it, and cause the heare to come again. We haue certaine medicines besides, that we vse generally for all diseases, as this, which is very soueraigne: take a handfull of beasts Longwort, a handfull of other Longwort that serueth for the pot, a handfull of inward rine of Elder, a handfull of Rewe, choppe them small, and put them into a pottle of good Ale, let them sæth till they bee softe, then stirre them, and put into the licour a peniworth of long Pepper, a peniworth of Graines, a peniworth of Liquerise, a peniworth of Annisæde, a halfe peniworth of Comen, a peniworth of Turmericke, all wel beaten, and put into the licour,

Panteys.

Taint.

Hide-bound.

Gargyse.

G

For all diseases.

with

with a quarter of a pounde of Madder: and whilſt all theſe doe ſæth, take a great bowledish, and put therein a handfull of Bay ſalt, halfe a handfull of Garlicke, foure new laid Egges, ſhelles and all, two bals of Oxtment, grinde all theſe thinges with a Peſtel in the Bowle: then take the licour aforeſaide from the fire, till it be halfe colde, and put the warme licour into the Bowle, with the Garlicke, Salt, Egges, and Oxtment, brewe it well together, and giue the beaſt to drinke blode warme, or a little more. Another of the ſame ſort is this: Two peniworth of Comen, a peniworth of Grains, two peniworth of Aniſſædes, a peniworth of Bay berries, a peniworth of Fenecricke, a peniworth of Turmericke, one ball of Oxtment, a peniworth of Tryacle, or rather for the Longes, three or foure ſpoonefulles of Madder, beate them all together, and put them in three quartes of drinke, ſet them on the fire, till they be blode warme, giue the beaſt no drinke in the morning before, nor tyll none after in the Sommer, and in the Winter till night: or if you will, you may giue them this medecine following: take Flint ſote, that is hard dried vpon a poſt or roſe, and beate it into powder with Salt, then take running water, and ſæth it, ranke Iuie, with the Sote and Salt, and when the Iuie is ſoft, take and wring out the iuyce, and ſtraine al together through a linnen cloth, and giue it your cattell to drinke blod warme, in the Spring, and at the fall of the leafe. *Bubale* called of the common people Buffes, of *Plinie Biſonte*, are common in Italie, beyonde the *Apenin*: a wilde and ſauage beaſt, that for their fierceneſſe, are handled with ringes of iron in their noſes, of colour blacke, their bodies large, and mightie, their legges well ſet, and knit verie ſtrong, and in reſpect of their body, ſhort, their hornes large cranied, and blacke, their haire ſmall and ſhort, their tailes little, they are in thoſe parts vſed for carriage, draught, and like vſes, as the Ore. Of the milke of this beaſt are made Cheeſes, that about Rome, and other places are greatly eſteemed. *Columella* counts them to be ſtrong meate, and heauie of digeſtion. Lo here is all that for my ſhare I haue to ſay, touching my cattel: nowe *HEDIO*, holde you the candell another while.

The Buffes.

HEDIO. Next vnto the greater sorte of cattell, the chiefest place is to be assigned to Shéepe: yea if you consider the great commoditie and profit, they are to be preferred before them: for as Oxen serue for the tilling of ground, & necessary vse of men, so is to this poore beast ascribed the sauegard of the body, for the Shéepe doth both with his fléese apparayle vs, & with his milk, and holesome flesh, nourish vs (as the Poet witnesseth.)

Sheepe.

Poore beast that for defence of man, at first created wast,
And in thy swelling vdder breast, the iuyce of dainty tast:
That with thy fleese kept'st of the cold, that should our limbs assaile,
And rather with thy life, then with thy death, dost vs availe.

Of shéepe there are sundry brédes. The ritch and the champion countrey, brédeth a large and a great Shéepe: the barraine and the clyffy, a resonable stature: the wilde and the mountaine ground, a small and a wéerish Shéepe. The olde husbandes, did greatly commend the brédde of *Milet*, *Appulia*, and *Calabria*, and most of all the brédde of *Taranto*, next of *Parma*, and *Modena*. At this day for the fineneſſe of their fléese, are most in price the Shéepe of England, of Germanie about the Rhine, and of France. *Varro* counselleth all such as would bye Ewes, to haue their chéefe consideration of their age, that they be neither to old nor to young: the one of them not yet come to it, the other already past profite: but better is that age, whereof there is some hope, then where there followeth nothing but a dead carcasse. Your best is therefore to bye them at two yéeres olde, and not to meddle with such as are past thrée: their age is to be knowen by their téeth, for the téeth of the olde ones are worne away: next must you loke, that your Ewe haue a large body, déepe wolled and thicke ouer all the body, specially about the necke and the head, and good store vppon the belly: for such as were bare necked and bellied, the olde husbandes alwaies refused. The necke must be long, the belly large, the legges short, though the Shéepe of England be long legged, the taile in some countrey short, in others very long: for in *Arabia* some haue tailes a cubite long, but wonderfull broad: others, (as both *Herodotus*, and *Ælianus* affirme) thrée cubites long, so that the shéepeheardes are forced to tie them vp, for being hurt with trailing

The choyse of Ewes.

trayling vpon the ground. In *Egypt*, a Rammes taile hath bin found to way twentie pound and more. The Ram must haue his hornes great, winding inwarde, and bending to the face, though in some place they haue no hornes at all, & yet no better Rammes: the hornes must rather crokle inward, then growe straight vp. In some countries, that are wet, & stormy, Goates and Rammes are to be chosen that haue the greatest & largest hornes, whereby they may defend their heads from storme and tempest: and therfore in colde and stormy countries, the horned Rams are best: in milde and gentle climates, the pold. Beside, there is this inconuenience, when he knowes himselfe to be armed, he wil alwaies be fighting, and vnruly among his Ewes: and though he bee not able to serue the turne himselfe, yet will he suffer no other Ramme in the flocke, till he be euen cloied, and lamed with lechery. The Pollard on the other side, finding himselfe vnarmed, is milder and quieter by much: wherfore the Shepheards, to restraine the rage of the vnruly, do vse to hang before his hornes a little borde with sharpe prickes inwarde, which keepes him from his madnes, while he perceiueth himselfe to bee hurt with his owne blode: others saye, that if you pearce his hornes with a wimble nert to the eares where they winde inwarde, he wil leaue his brawling. In some places also the Ewes are horned: but to the Ramme his eies must bee browne, his eares great, his brest, shoulder, & buttockes broade, his stones great, his taile broade, and long: you must loke beside, that his toong bee not black, nor pecled, for commonly such will get blacke and pied lambes, as *Virgil* noteth. Rammes

And though the Ramme in sight be white as snowe,
If blacke within his iawes his toong be wrought:
Refuse him quite, least if he leape thy Yowe,
He do infect thy folde with colour nought.

Bie not not your sheepe but washed and vnshorn, that the color may plainlier appeare: the white colour, as it is ỹ beautifullest, so is it the profitablest. In March is your best bying of sheepe: for shepheardes like such as haue well worne out the Winter. Whosoeuer will bee a sheepemaster, must regard the abilite of his grounde: for it is not enough to haue pasture in Sommer, When to bie sheep.

But they must be well prouided for in winter: in any wise, you must haue store of pasture, and better it is, and more profitable to the Master, to keepe a fewe Sheepe well, then a great number with scarsitie of pasture. *Florentinus* is of that fancie, that he woulde your number should rather be odde then euen, thinking that number more fortunate, for the healthinesse, and long continuance of the cattell: but these are superstitious toyes, as are a great number of others imagined by the faithlesse. Be sure euery yeere once, to make your musker, and supply the places of such as are dead, or sicke, with a newe and a sound number, so that the Master be not deceiued with an olde vnprofitable flocke. The hardnesse and crueltie of the colde Winter, doth often times beguile the shepheard, and destroieth many of his flocke: wherof (presuming of their strength in the end of the Sommer) he had made no supply, and therefore *Columella* is of oppinion, that the age for breede ought not to be lesse then three yeeres, nor aboue eyght, both because that neither of the ages is meete to be keept: and also that whatsoeuer commeth of an olde stocke, hath lightly a smack of his olde parentes imperfection, and proueth either to be barraine, or weake. The selfe same *Columella* would haue the Ewes to be put to the Ramme, after they had passed two yeere olde, & the Ramme to be of fiue yeere olde, and after seuen, to decay. In many places at this day, they suffer both the kindes to breede from two yeere olde, till nine: but before two yeeres, it is not good to put either the Ramme, or the Ewe to breede, although in most places they suffer the Ewes at a yeere old. The Ramme is put by his purpose, by the Wickers, or Bulrishes, tied to the Ewes tayle, but more commodiously, by going in seuerall pastures: howbeit, they are not commonly seuered, but suffered to go together. The Rammes that you would haue to serue your Ewes, must afore the blossoming, bee kept in good pasture, for two monethes, whereby they may the better be able to doe their businesse: but in our countrey, we commonly suffer them to feede together. To encrease their lustes, you shall giue them in their pasture, the blades of Onions, or Knotte Grasse: they rather couet the olde Ewes, then the yong, because

they

they be eaſlyer to be entreated, and the Rammes them ſelues in age be the better. By knitting of the right ſtone, you ſhall haue Ewe Lambes, and of the left, Ramme Lambes: alſo their bloſſoming in the Northwind, getteth Ramme Lambes, and in a Southwind, Ewe Lambes. One Ramme (as *Didymus* affirmeth) ſufficeth for fiftie Ewes: when they haue all conceaued, the Rammes muſt againe be baniſhed, for dangering and harming the Ewes. During the time of their bloſſoming, they are to be watred in one place (as both *Varro* and *Plinie* affirme) becauſe the change of water both diſcoloureth the woll, & dangereth the Lambe. The policie of *Iacob* the patriarche, in procuring of partie coloured Lambes, is well enough knowen. The beſt time for bloſſoming, is from the ſetting of the Bearwarde, to the ſetting of the Egle: (as *Varo* and *Columella* haue written) which is (as *Plinie* interpretes it) from the third Ides of May, till the thirteene Kalendes of Auguſt, other thinke it good all the yeere long, many prefer the Winter Lambe before thoſe that fall in the ſpring, as a creature that of all others, beſt broketh his winter breth. The thunder, if the Ewes go alone, makes them caſt their Lambes, and therfore it is good to let them go with companie, for auoiding that perill: they goe with Lambe, 150. daies, or fiue monethes: ſuch as are afterwarde dammed, are feeble and weake, and ſuch were of the old writers called *Cordi*: for the moſt part they bring but one Lambe a peece, yet oftentimes two, and if they be well fedde, fiue at a time. It hath been ſeene in Gelderland, that fiue Ewes haue had in one yeere, fiue and twentie Lambes: it may ſeeme peraduenture to many vncredible, and yet no great marualle, ſince they haue twiſe a yere moſt times two, and ſometime fiue at a time. The ſhepeheard muſt be as careful as a midwife in the yeaning time: for this poore creature (though ſhe be but a Shoepe) is as much tormented in her deliuerie, as a ſhrew, and is oftentimes the more dangerouſly vered and payned in her labour, in that ſhe is altogether without reaſon: and therefore it behoueth the ſhepeheard to be ſkilfull in medcening of his cattell, and ſo cunning a midwife withal, as if néde require he may helpe his Ewe, what danger ſoeuer happen. The Lambe

as ſoone as he is fallen, muſt be ſette on foote, and put to the dammes vdder, and oftentimes his mouth held open, the milke muſt be milked in, that he may learne to ſucke: but before you doe this, you muſt be ſure to milke out the firſt milke called *Coloſtra*, whereof I will ſpeake hereafter: for this, except ſome quantity be drawen out, doth hurt the Lambe: if the damme dy, you muſt ſuckle it with a horne: if the Lambe will not of him ſelfe ſucke, he muſt be put to it, and his lippes nointed with ſweete Butter, and Swines greaſe, and ſeaſoned a little with ſweete milke. As ſoone as they are lambed, they muſt be ſhutte vp together with their dambes, whereby both the dambe may cherish them, and they learne to know their dambes. Afterwarde, when they begin to ware wanton, they muſt be ſeuered with Hardelles: or (as *Varro* writeth) after tenne daies they muſt be tied to little ſtakes with ſome gentle ſtay, for hurting of their ioints, and waring leane with to much play. The weaker muſt be ſeuered from the ſtronger, for hurting of them. And in the morning betimes, before the flocke goe to paſture, and in the euening when they be full, the Lambes muſt be put to their dammes: and when they ware ſtrong, they muſt be fed in the houſe, with Clouer, and ſweete graſſe, or elſe with branne, and Flowre. And when they haue gotten greater ſtrength, they muſt be let out with their dammes about noone, in ſome ſunnie and warme cloſe nere adioyning. In the meane time, you muſt not deale with milking of the Ewes, ſo ſhall you haue them to beare the more woll, and bring the more Lambes. When the Lambes are taken from their Dammes, good hede muſt bee had, that they pine not away: and therefore they muſt be well cheriſhed in their weaning time with good paſture, and well kept, both from colde, and extreame heat. Now after that they haue forgotte̅ the vdder, that they care not for their dams, then ſhall you let them fede with the flocke: howbeit in moſt places the Lambes are ſuffered to fede in the flocke together with their dammes, and to ſucke till haruell time, till the dams themſelues do weane them. *Varro* would haue you not to geld your Lambes vnder fiue moneths old, and that in a ſeaſon neither too hot, nor too colde: but experience teacheth vs, that the beſt

beſt gelding is vnder the damme when they be yongeſt: for in the elder (as in al other beaſts) it is dangerous. Thoſe that you wil kéepe for Rammes, you muſt take from ſuch Ewes as vſe to haue two at one time. The beſt paſture for ſhéepe, is the Graſſe that is turned vp with the Plowe, and groweth vpon fallowes: the nert is that, that groweth in drye Meddowes: the marſhy grounde is to bée refuſed, and that which groweth néere vnto Lakes, and Fennes: the plaine and the champion Fœldes and Downes, are beſt for the delicateſt and fineſt woolled Shéepe. To bée ſhorte, the ſhorter and fyner the Graſſe is, the méeter is it for ſhéepe: and yet is there no paſture ſo good, or ſo fine, but with continuall vſe your ſhéepe wyll bée wearie of, except the ſhepehearde remedie this fault with giuing of them ſalt, which (as a ſauce to their foode) hée muſt ſet readie in Sommer when they come from paſture, in little Troughes of Wood, by licking whereof they get them an appetite both to their meate, and their drinke. For where as ſhéepe ware ſoneſt fat with watring (as *Ariſtotle* affirmeth) you muſt in Sommer euery fifth day let them haue ſalt, a peck to euery hundred: ſo ſhall your ſhéepe bée alwayes healthy, ware fatte, and yélde you plentie of milke. Moreouer, againſt the Winter rotte, or hunger rotte, you muſt prouide to fœde them at home in Cratches. They are beſt fedde in the warmer countreys, with the leaues and brouſinges of Elme, and Aſhe, and the haie that is made after haruеſt in the end of Sommer, becauſe it is ſofteſt, and therefore ſwéeter than the other. With what héede and carefulneſſe this cattell is to be fedde, *Virgil* declares, who wils a regard to bée had of the times, both of their watring, and fœding.

When Sommer faire with Weſterne windes doth call,
Your luſty flockes to woods and paſture ſend
Betimes, when day doth ſpring and ouer all
The gladſome graſſe the hoary deaw doth bend.
From thence when as the fourth houre of the day,
With lofty Sunne doth make them dry to bee,
To wels or waters deepe go take thy way,
And make them drinke in troughes of Oken tree.

But in the none time, and the heate of the day, you must driue them to the valleies, and shades (as he saith) a little after.

Whereſoeuer of Ioue the ancient Oken tree
His broade and mightie branches ſpreades, or where
In ſacred Groues of Holmes the ſhadowes be.

After when the heate is past, you must driue them again to the water, and so bring them againe to fælde.

When ſunne is ſet, and euening ſtarre appeeres,
Then cooles the aire, and deawy Moone ſhe cheeres.

Varro affirmeth, that they deuyded their pasturing times in *Puglia*, after this maner. First they put them out to pasture betimes in the morning, when as the deawy grasse doth farre excæde in pleasantnesse, and sweetenesse: the Grasse that being burnt with the heate of the Sunne, is ouer dry. About none againe, till it ware colet, they are to be driuen vnder some colde or watry Rockes, and breade shadowed trees, and towarde the euening bee suffered to feed till Sunne set, alwaies hauing regarde, that in their driuing, their heads be from the sunne: for no beast is so tender headed. Within a little after the setting of the Sunne, they must be driuen to water, and after suffered to fæde againe, till it be darke: for then is the pasture sweetest. This order is to be obserued from ỹ rising of the seuen starres, and the lesser dogge, till the latter *Æquinoctial*. The like doth *Columella*, and *Plinie* teach, that after the rising of the Dogge, the flocke must afore none bee driuen Westwarde, and fæde wyth their face towarde the West, and after none they must bee brought againe Eastwarde. The fældes whence the corne is newly had off, is good to pasture them for two causes, both for that they are well fedde with the leauings of the sheaues, and that with the trampling of the strawe, and dounging, they make the ground richer against the next sowing: but our countrey men doe not well like, that Sheepe should fæde vppon the eares of Wheate. The pasturing of them in the other seasons, as Winter, and the Spring, differs in this point, that they put them not abroad, till the Sunne haue drawne vp the dewe, and hurtfull vapors of the grounde, and so fæde them all the daye long, thinking it sufficient to let them drinke at none: but our

husbandes

husbandes vse not to suffer their Shæpe to fæde abroade in the Sommer time, neither before the Sunne ryſing, nor after the ſetting, by reaſon of the dewe being more hurtful in Sommer, then in Winter. In Winter, and the Spring time, they kæpe them in a folde, til ſuch time as the Sunne hath drawne vppe the Rimes and hoare froſtes from the Fældes: for the froſtye Graſſe at this time of yære, ſtops their heades with Rhume, and fils their bellies full of water: and therefore in the cold and wette ſeaſons of the yære, it is enough to let them drinke once a daye. Moreover the ſhepeheard, as alſo the kæper of al cattel, muſt deale gently, and louingly with their flocke, and comforting, and chæring them wyth ſinging, and whiſtling: for the *Arabians* (as *Alianus* writeth) doe finde, that this kind of cattell taketh great delight in muſicke, and that it doth them as much good as their paſture. Beſide, they muſt bæ well ware in the driuing of them, and ruling of them, that they guide them with their voice, and ſhaking of their ſtaffe, not hurting, nor hurling any thing at them, nor that they be any time farre off from them, and that they neither lye nor ſitte: for if they goe not forewarde, they muſt ſtande: for it is the ſhepeheards office to ſtande alwaies as hie as he can, that he may plain and eaſely diſcerne, that neither the ſlowe, nor the great bellied in laning time, nor the quicke, nor the liuely, whyle they roame, bæ ſeuered from their fellowes: and leaſt ſome thæfe, or wylde beaſt, beguile the negligent ſhepeheard of his cattell. Of their paſturing, I thinke I haue ſpoken ſuffitiently, and therefore I meane now to ſhew you of their houſes, or ſhepecots, wherof there ought to be a ſpeciall regard, that they be conueniently placed, not ſubiecte to winds, nor ſtormes, and that they rather ſtand toward the eaſt, then toward the ſouth. *Columella* woulde haue them built lowe, and rather long then brod, that they may be warme in the winter, and that the ſtraightneſſe of the rome hurt not the yong. And beſide, he would haue them ſtande towarde the South: for this beaſt (though his garmentes bæ warme) cannot away with cold weather, neither yet with the great heate of the Sommer. I haue ſæne ſome ſhæpe houſes ſo framed, as they haue had their gates towarde the South, and towarde

Sheepecots.

towarde the East, that they might answere to the seasons of the yeere. *Columella* woulde haue the House set towarde the South, and on the backeside a close Posterne, where they maye safely take the aire. You must loke besides, that where they stande, the grounde bee made fayre and euen, some thing hanging, that it may bee cleane kept, and that the vrine may be well voided away: for the wetnesse hereof doth not onely hurt and corrupt their feete, but also spoileth their coates, and maketh them rofe, and ill fauoured. Let there bee no moysture therefore, but alwaies well strawed with dry fearne, or strawe, that the Ewes that bee with yong, may lye the softer and cleaner. Let their beddes be very cleane, for the cleaner they lye, the better they feed: let them in any wyse be well fedde: for a small number (as I said before) wel fed, yeelde more profite to their Master, then a great flocke barely kept. You must also haue seuerall partitions to keepe the weaker and the sicke, from the strong and vnruly. And thus much of housed shéepe, that are euery day brought home, but in some places they are kept abroade, farre from either town, or house. In Forests, and vpon wilde fields and downes, in these places the shepeheard carrieth with him his Hardelles, and his Nets, and other necessaries, to folde his flocke withall. In the desart fields, when as the winter pastures, and the sommer pastures, are distant certaine myles a sunder (as *Varro* saith) he woulde haue the flockes that haue wintred in *Apulia*, to be kept in sommer vppon the mountaines of *Kiete*, and *Virgil* thus writeth of the shepeheards of *Lybia*.

What should I here of Lybian shepeheards tell,
Or of their pastures writ, and dwellings poore:
That night and day on downes, and desarts dwell,
Where wanders still the flocke without the doore:
And on the ground doth lie the shepeheard heare,
While he remooues with him continually:
His house, and all his household goods doth beare,
His staffe, his dogge, and all his armory?

The like haue I my selfe seene in Swycherland, and other places of Germany, where the shepheard, lying still abrode with his flocke, foldes his Shæpe in the night with Hardels, tying their dogges about them for watchmen: the shepheard him selfe in a little house vppon wheeles, sleepes hard by his charge. The Shæpe of Græce, *Asia*, an *Toranto*, and those which they call couered Shæpe, are commonly vsed to be kept in houses, rather then abroade, for the excellencie and finesse of their woll.

EVPHOR. What times do you appoint for the shearing of your Shéepe?

HEDIO. The times of shearing, are not in all places one, but varry, according to the disposition of the ayre, the cattell, and the countrey: the best way is to haue good regarde to the weather, as the Shæpe be not hurt by shearing in the colde, nor harmed by forbearing in the heate. In some places they haue two seasons in the yære for shearing of their Shæpe: the first season for their shearing, is either with the beginning of May, or els with the ending of Aprill: the second season of their shearing, is about the beginning of September. Such as dow vse to sheare their Shæpe but once in the yære, doe commonly appoint for their season, the tenth of the moneth of June, about which time also such as doe sheare twise a yære, doe sheare their Lambes. Three daies before you sheare them, you must wash them well, and when they be full dry, you may sheare them: they doe not in all places sheare their Shæpe, but in some places (as *Plinie* saith) pull them The olde husbandes did account for the best woll, the woll of *Puglia*, and that which in Italy was called the Græke fleese: the nert in goodnesse they toke to be the woll of Italy: in the third place they estæmed the *Milesian* fleese: the woll of *Pullia* is but short, and mæte to be worne onely in riding clokes. The woll about *Toranto*, and *Canas*, is thought to be passing good: but the best at this day, is the woll of Englande. The finer your pasture is, the finer (as it is thought) you shall haue your woll. The woll of such Shæpe as are slayne by the Wolfe, and the garmentes made thereof (as *Aristotle* saith)

Shearing of sheepe.

is

is aptest to breede lice. If you happen in the shearing to clippe the skinne, you must forthwith annoint it with Tarre: when you haue shorne them, some thinke it good you annoint them with the iuyce of sodden Lupines, Lees of olde Wine, and the dregges of Dyle made in an oyntment, and after three dayes to wash them (if it be neare you) in the sea, or if the sea be farre of, with raine water sodden with Salt. And being thus ordred, you shall not haue them to lose their woll all the yeere, but to be healthy, and to carry a deepe and a fine fleese, and therefore *Virgil* biddes you,

Go plondge them oft in healthy streames.

There be some againe, that would haue you to annoynt them three daies in the yeere, the daies being sone after you haue washed them with Dyle, and Wine mingled together. Against Serpents, that many tymes lie hid vnder their Cribbes, you must burne Cedar, *Galbanum*, or womans heare, or Hartes horne: in the ende of Sommer is your time for drawing and seuering of them (as I told you before) when you must sell your Sheepe, that through feeblenesse, they faile not in the Winter. Beside, killing one or two of them, you must looke well vppon their Liuers, and if the Liuer be not sounde (for hereby is foreseene the daunger) then either sell them, or fatte them, and kill them: for very hard is it to saue them, their Liuers being perished. Infected Sheepe, are more subiect to skabbes and manginesse, then any other cattel, which commeth (as the Poet witnesseth)

When coldest stormes do wette them neare,
And hoary frostes on ground appeare.

Or if you washe not of the sweate of the Sommer with Salte water, or otherwise. If when they be shorne, you suffer them to be hurt with brambles or thornes: or if you put them into houses, where either Horses, Mules, or Asses haue stand, but specially lacke of good feeding, whereof proceedeth poxenesse, and of poxenesse, skabbes and manginesse. The sheepe that is infected, is thus knowen: if he either scratch, stampe with his foote, or beate him self with his horne, or rubbe him self against a tree: which perceiuing him so to do, you shall take him, and

opening

opening his woll, you shall finde the skin ruffe, and as it were itchy: diuers men haue diuers remedies for this maladie, but such as are not at hande to bee had, *Virgil* thinkes there is no presenter remedy,

Then at the first to clyppe away the sore:
For being hid, it festereth the more.

Constantine out of *Dydimus* affirmeth, that the skabs of Sheepe are healed by washing them with wine, and after annointing them wyth Brymstone, and Oyle. The common shepheards, when they perceiue a Sheepe to fall a rubbing, they straightwaies take him, and shedding the heare, doe seare the place with Tarre: other doe teach other remedies more harde to bee com by, which are not for euery shepehard, nor euery countrey to vse. And if the whole flocke bee infected, it doth many times so continue, as it shall be needfull to change houses, and (which in all other diseases behoueth) both Countrey, and aire. This one alonely medicine haue I alwaies proued for the keeping in health of this cattel, to be most present and soueraine: take the berries of Juniper, beate them small, and sprincle them with Dates, and Salte, mingle them all together, and giue it your Sheepe, three or foure times in the yeere: for though they refuse to eate the Juniper berries of themselues, yet for the desire of the salte, and the oates, they will easily take them altogether. If they be lowsie, or full of tickels, they vse to beate the rootes of Maple, and seething them in water, and opening the woll with their fingers, they powre the licour, so as from the ridge of the backe, it runne all ouer the body. Others vse the roote of Mandrake, being well ware that they suffer them not to taste it. If they haue the feuer, you must let them blood in the heele, betwirt the two Clees, which the Poet teacheth saying:

It easeth straight the flaming feuers paine,
If in the foote you strike the spinning vaine.

Some let them blood vnder the eies, & some behinde the eares. The Fowle, a disease betwirt the Clees, is taken away with Tarre, Alome, Brimstone, and Vineger mingled together: or powder of Verdigrese put vppon it. The swelling betwirt the two Clewes, must be cut with great warinesse, lest you hap to

cut

cut the woꝛme that lieth in it, foꝛ if you doe, there commeth from her a hurtfull mattring, that poyſoneth the wound, and maketh it vncureable. Maſter Fitzherbert, a Gentleman of Northamptonſhyꝛe, who was the firſt that attempted to wꝛite of Huſbandꝛye in Englande, appointeth this cure: hys woꝛdes be theſe. There be ſome Sheepe that haue a woꝛme in his foote, that maketh him to halte, take that Sheepe, and loke betwirt his Cleꝛs, and there you ſhall finde a little hole, as much as a great pinnes head, wherein groweth fiue oꝛ ſixe blacke haires, like an inche long, oꝛ moꝛe: take a ſharpe pointed knife, and ſlitte the ſkinne a quarter of an inche long aboue the hole, and as much beneath, and put thy one hand in the hollowe of the foote, vnder the hinder Cleꝛ, and ſet thy thumbe aboue, almoſt at the ſlit, and thꝛuſt thy finger vnderneath foꝛwarde, and with your other hande, take the black haires by the ende, oꝛ with thy knynes point, and pulling the haires a little and a little, thꝛuſt after thy other hande, with thy finger & thy thumbe, and there wyll come out a woꝛme, like a peece of fleſhe, neere as bigge as a little finger: when it is out, put a little Tarre in the hole, and it will ſhoꝛtly mende. If they happen by the extreame heat of the Sun to fall dowꝛne, and to foꝛſake their meate, giue them the iuice of the wilde Beete, and cauſe them beſide to eate the Beetes. If they hardly dꝛaw their bꝛeath, ſlitte their eares, and let them bleede. If they be trowbled with the cough, Almondes beaten with wine, and powꝛed a pꝛetie quantie into their noſtrilles, remedieth them. A Sheepe, oꝛ Swyne, that hath the murreyne of the Lonnges, you ſhall helpe by thꝛuſting thꝛough their eare, the roote of Setterwoꝛt: this ſickneſſe doth commonly ſpꝛing of want and ſcarſitie of water, and theꝛefoꝛe (in Sommer time ſpecially) you muſt ſuffer no kinde of cattel to want water. Their legges if they happen to be bꝛoken, are to be cured in like ſoꝛt as mens bee, being wꝛapped firſt in Wooll, dipped in Oyle and Wine, and afterward ſplented. The yong Lambes, and other Sheepe alſo while they goe abꝛoade, are troubled with ſkabbes, and manginelle about their lippes, which they get by feeding vpon dealwie graſſe, the remedie, is Hyſope, and Salt, of eche a like

Maſter Fytzherbert for curing of Sheepe.

The murreine of the lungs

Lambes.

like quantitie beaten together, and their mouthes, their pallattes, and their lippes rubbed withal: the vlcerous places, must be nointed with Vineger, Tarre, and Swines grease. If they chaunce to swell with eating of any wormes, or venemous grasse, you shall let them blood in the vaines about the lippes, and vnder the tayle, and after powre into them chamberly. If they happen to swallow a Horsleache, powre into them strong and tarte Vineger warme, or Oyle. Against the murrion, or the rotte, I haue séene geuen them, certaine spoonefulles of Wine, and after a little Tarre: this medicine was vsed by Master John Franklin of Chart in Kent, who was in his life time a skilfull husband, and a good housekéeper. In like sorte haue I séene this medicine. Take for euery sore, one penniworth of Treacle, and likewise one little handfull of Hempséede, ground Iuie, Elder leaues, and Fetherfewe, as much as a Tennisball of Lome, and asmuch bay salte, put thereto Chamberly, and a little Swte, make it all luke warme, and géue to euery one three spoonefulles good, and after euery one a little Tarre, before they goe out of hand. In some places they vse to take the dried flowers of Wormewood, and mingling them with salte, they geue them to their Shéepe, as a generall medicine against all diseases. This medicine is commended by *Hierominus Tragus* both for aswaging of any paine, and driuing away any hurtfull diseases from cattell.

Eating wormes, or venemous grasse.

Master Iohn Franklin.

EVPHOR. Good *HEDIO* forgeat not to speake something of your Goates.

HEDIO. Goates haue many thinges common with shéep, for they goe to Bucke at one time, and goe as long with yong as the Shéepe doe: they yéelde commoditie with their flesh, their Milk, their Chéese, there skins, and their heare: the heare is profitable to make ropes of, and packes, and diuers like instrumentes belonging to sea men, by reason that it neither rottes with moisture, nor is easely burnt with fire. *Varro* maketh mention of two sortes of them, a heary sort, and a smothe. Such as haue Wennes, or Wartes vnder their Chinnes, are taken to bée most fruitefull: their Vdders would be great, their Milke thicke, and the quantitie much.

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The hée Goate would be softer heared, and longer, his Necke short, his Throateboll déeper, his Legges fleshy, his Eares great, and hanging: it is thought better to bye the whole flocke thgether, then to bye them seuerally. At the Chinne of euery one of them hangeth a long beard, which *Plinie* calleth *Aruncũ*, by which, if any man drawe one of them out of the flocke, the whole flocke (as amased) stand gazing vppon him. The hée Goate, because of his beard, and (as *Alianus* saith) by a certaine instinct of nature, preferring the male before the female, goeth alwaies before his woman. The bargayning for this cattell, is not after the maner of bargayning for Shéepe: for no wise man will promise that they be frée from sickneſſe, being as they be, neuer without the Agewe: but he assures them that they be well to day, and can drinke. One thing is to be wondred at in this beast, that he draweth not his winde as all other beastes dw at his Nose, but at his eares. The best kindes of them, are those that bring forth twise a yéere, and such you must séeke for your bréede. The Goate is able to engender at seuen moneths olde, being euen as lecherous as a Goate: for while he is yet sucking, he will be vppon the backe of his dam: and therefore hée wareth féeble, and vnable, before he bée sixe yéeres olde, being now soked and consumed with his ouertimely lustinesse of his youth: and therefore after hée come to bée fiue yéere olde, he is no longer to serue your turne for bréede. The time when you shall suffer them to go to rutte, is in *Autume*, a little before December, that at the comming of the spring, and blossoming of the trées, the yong may bée brought forth. The Goate goeth with yong (as I saide) fiue monethes, as the Shéepe doth: shée bringes forth commonly two, and sometime sixe (as *Plinie* witnesseth.) Such as beare twise, you must kéepe for your stocke, for the renuing thereof, and the encrease. As touching their bréeding, you must in the ende of *Autume* seuer your he Goates. The yong Goates of a yéere olde, and two yéeres, bring forth Kidds: but (as *Columella* saith) they are not to be suffered to bring them vp, except they bée three yéeres olde: and therefore you must away with the yong, that the Goates of the first yéere may bréede:

and

and ſuffer the Kidde of a two yéere damme, to ſucke no longer then it is méete to be ſolde. When the Kiddes are brought forth, they muſt bée brought vp in like ſorte as I tolde you of the Lambes: ſauing that the wantonneſſe of the Kidde is more to be reſtrained and héedelier to be kept in, and muſt be fedd beſide their milke, with young bolwes. *Plinie* affirmeth, that they be ſkarſe good for bréede at three yéere olde, but if they paſſe foure, they be ſtarke nought, and that they begin at ſeuen monethes, euen while they be vnder the mothers breaſt. The firſt riding proſpereth not, the ſecond is somewhat to the purpoſe, the third ſpredth, ſhe bringes forth, till ſhe be eyght yéeres old, and therefore the ſhe Goates, when they be aboue eyght yéeres, is not to be kept: for ſhe then becometh barraine. Thoſe which want hornes (as in the male kinds) of all others be the beſt: for the horned, by reaſon of their weapons, are hurtfull and vnruely. Beſides, the female of ſuch as lacke hornes, doo giue alwaies greater plentie of milke: but *Columella* (as he commendeth the Pollardes in a temperate and milde Countrey) ſo in a boiſterous and a ſtormie Region, hée would haue them horned. Such as haue Hornes, doe ſhewe their age by the circles of their hornes: it is thought, that they ſée as well by night, as by day, and that they alwaies lay their faces turned one from the other, and in that order alſo fédde. Cold (as it is ſaid) is verie hurtfull to this kinde of Cattell, ſpecially to thoſe that be with young, as likewiſe the extreame heate. The witte of this beaſt *Nutianus* reporteth, he once had experience of, whereas a couple of them chaunced to méete vppon a verie long and narrowe Bridge, and the ſtraightneſſe would not ſuffer them to turne, and to goe backwarde blindfolde in ſuch a ſtraight, conſidering the ſwiftneſſe of the ſtreame vnder them, was more vnpoſſible, the one of them lying downe, the other paſſed ouer his body. *Varro* doth commend ſundry little flocks kept ſeuerall, rather then greate flockes together, vſing for example one *Gaberius*, becauſe a great flocke is ſoner ſubiect to the murrine, thinking fifty to bée enough for one flocke. *Columella* alſo affirmeth, that there ought not to goe aboue one hundred of them together, whereas of Sheépe hée alloweth a thouſand

in one flocke. The biting or bruſing of them, is poiſon to all kinde of Trées, and therefore were they in olde time ſacrifiſed to *Bacchus*, becauſe they were ſo hurtfull to Vines. Their ſtables *Columella* would haue to ſtand vpon a ſtony ground, or els to bée paued, for this beaſt néedeth nothing vnder him but a fewe bowes: when he lieth abroad, the ſhepheard muſt often ſweepe and make cleane their houſes, not ſuffering any doung, or moiſture, to remaine in them, that may be hurtfull to the flocke: for as I ſaide before, they are ſeldome without Feuers, and much ſubiect to the peſtilence. And whereas other cattell, when they haue the Murraine amongſt them, as ſoone as they bée infected, beginne to languiſhe, and pine away: onely theſe Goates as ſoone as they be taken, though they be neuer ſo luſtie to looke vpon, ſuddenly fall downe together, and die as thicke as Haile: which diſeaſe doth chéefely happen, by too much rankeneſſe of paſture. And therefore as ſoone as you perceaue one or two of them fall downe, let the whole flocke bleed with as much ſpéede as you may, and ſuffer them not to féede all the day, but ſhutte them vp the foure middle houres of the day. If they be diſeaſed with any other ſickneſſe, you muſt giue them the Rootes of Réedes, and of the great white Thyſtle, ſtamping them with iron peſtels, and ſtrayned with rayne water let them drinke it: and if ſo be this medecine heale them not, your beſt will be to ſell them, or to kil them, and pouder them: and when you bie newe, bring them not home to haſtely, till the diſpoſition of the aire be altered. If they fall ſeuerally ſick, cure them in ſuch ſort as you doe your ſhéepe. *Florentinus* ſaith, if you ſtampe with water the Guyſard of the Storke, and giue them to drinke a ſpoonefull a péece, it preſerueth both ſhéepe and Goate from al murraine and peſtilence. If their bellies be ſwelled with water, which the Grecians call ὑδρωπα, the Dropſey, if the ſkinne be launced a little vnder the ſhoulder, it lets out the hurtfull matter, and you may heale the ſore with Tarre.

EVPHOR. You haue for your part very well ſatiſfied vs, touching the good ordering of your Cattell: there remaines yet one thing for you, which wée all forgate to ſpeake of, and

that

that is the ordering of Mylke, our cheefest fode and sustenance.

HEDIO. Seeing that of this Cattell whereof I haue entreated, the profit of the Milk is not smal, it is no great reason wee shoulde ouerpasse the ordering of the same: for Mylke (as *Varro* saith) of all liquid thinges wherewith wee feede, is the greatest nourisher. Milke differeth in goodnesse according to the nature of the bodies that giue it: as the milke of Women, of Kine, Sheepe, Goates, Asses, Mares, and Cammels: the greatest nourisher is Womans Milke, the nert Goates Milke, whereby the Poets faine, that their god *Iupiter* himselfe was nursed with Goates Milk: the swetest nert to Womans milke, is the Cammels milke: the holesomest, is Asses milke: the Asse as sone as shee is with Colt, giueth milke: the Cowe, neuer till shee haue Calued: most comfortable to the stomacke, is Goates milke, because hee rather feedeth on Bruttes and bowes, than vpon grasse. Cowe milk is most medicinable, and most of all loseth the belly. Sheepes Milke is swéter, and nourisheth more, but is not so good for the stomacke, by reason it is fatter and grosser. All milke that is milked in springtime, is watrisher then the milke of sommer, as likewise is the milke of yong Cattell: it is holsomest being fodden, specially wyth the Pebbles of the Sea. The Sheepe about *Pontus*, neere to the Kyuer *Astace*, doe giue (as *Plinie* saith) blacke Milke. All milke generally (as *Dioscorides* writeth) is of good nourishment, but filleth the stomacke and the belly with winde: that which is milked in the Spring, is thinnest but loseth the belly most. The difference of Milke, is taken (as *Varro* saith) of the pastures, the nature of the cattell, and the milking. Of the Pasture, when the Cattell is fedde with Barly, Strawe, and all other hard and dry meates, and this greatly nourisheth. For purging of the Belly, the Grasse Pastures, specially where the cattell feede of purging hearbes, as *Cardamus* in his booke *de plantis* teacheth, that if you will purge Melancholy, you must féede your milch Goate, or Asse, with *Polipodi*, and for all other humours *Sene*, for the Dropsie with *Spurge*, or *Agaricke*: for clensing of the blode, with Fumitorie, or Hoppes:

Milke.

Blacke milke.

Error in the vnderstanding of Dioscorides.

and if you will but onely lose the belly with Mercury, or Mallowes: so farre *Cordanus*. Our countreymen doe chiefely commende for milke, the pastures where groweth Spery, and clauergrasse, and that is all bedeckt with yellowe flowres. For the Cattell, the difference is betwirt the sicke and the healthy, the yong, and the olde: and for the mylking, that is best, that is not long kept after the milking, nor that is milked immediately vppon the Caluing, a grosse vnholsome kinde of Milke. To trie whether milke be mingled or not, you shall take a sharpe Rushe, and putting it into the milke, let it droppe from thence vppon your Nayle, and if the drop runne abroade, it is a signe there is water in it: if it keepe together, it shewes it to bee pure and good. Of Milke is made Butter, whose vse (though it bee chiefely at this day among the Fleminges) is yet a good and profitable foode in other countreys, and much vsed of our olde Fathers, yea euen of the very Patriarches (as the scriptures witnesseth) the commoditie therof, besides many others, is the aswaging of hunger, and the preseruing of strength: it is made in this sort. The milke, assoone as it is milked, is put out of the Paile into Bowles, or Pannes, the best are earthen Pannes, and those rather broade then deepe: this done, the second, or the third day, the creame that swims aloft, is fletted off, and put into a vessell rather deepe then big, round and Cilinder fashion: although in some places they haue other kinde of Charmes low and flat, wherin with often beating and mouing vp and downe, they so shake the milke, as they seuer the thinnest parte of from the thicke, which at the first gather together in little crombles, and after with the continuance of the violent mouing, commeth to a whole wedge, or cake: thus it is taken out, and either eaten fresh, or barrelled with salt. The Buttermilke that remaineth of the Butter, is either kept for the famely, or giuen to Calues and Hogges, as a daintie foode.

Butter.

Cheese. Cheese is also made of the Milke of Cattell, the Milke being powred into a Vessell of earth, putting into it a little Rennet, the quantitie of a Walnutte, in a great vessel of Milke, whereby it runneth into Curde. *Varro* doth better like the Rennet of the Leuret, or the Kidde, then the Lambes: howbeit, we commonly

monly vse the Calues Rennet: others vse sundry other meanes onely with heate, warming it in Tinne vessels, and after dipping these Vessels in colde Water, which is the sweetest and cleanliest manner: others put in the seede of wilde Saffron, and being so turned, the Whay doth greatly pourge fleame: others againe vse the milke of the Figge tree, and then doth the Whay pourge both choler and fleame: some turn it with *Oximell*, or sirope of Viniger, which is of all other waies the holsomest: some besides, vse the little skinne of Birdes Guisards, and others, the flowres of wilde Thistles, or Hartichockes. The newer and better the Milke is, the better will be the Cheese: for made of two sorts of milke, or milke that is to neare fleeted, it sone sowreth, and wareth hard and nought, and is not to endure any while. Againe, being made of fatt and newe Milke, it will very long endure, and long continueth in his fatnesse and softnesse: about a two or three houres after you haue put in your Rennet, the Milke commeth to a Curd, which is straightwaies put into Formes, or Cheesefattes, and pressed: or if they bee but small, they are onely pressed with the hand. If they be of any quantitie, they haue greate waight vppon them, it is very needefull you presse out the Whay with as much spéede as you can, and to seuer it from the Curd, and not to let it lie slowly drayning of it selfe. Those that make great Cheeses, haue mouldes for the purpose, and Weightes and Presses answerable. After this, they take them out of the Presse, and lay them vpon Hardelles, or faire smoth Tables, in a shadowy and a colde place, and close from all windes, springling them all ouer with Salt, that they may sweate out all their sowrenesse, laying them so, as they touch not one the other. When they be now well hardned and thickned, they are taken vp, and pressed againe with greater weightes, and rubbed ouer with parched Salte, and after laide in presse againe, whereby it is thought they will neither haue eyes, nor be ouer drie: which faltes happeneth to come when they be either not well pressed, or too much salted. Some vse to put into the bottome of their Pailes, the greene kernelles of the Pine apple, and milking into them, doe cause it so to turne. You may also cause your Cheese to relish of

what ſoeuer you will, as Pepper or any other Spice: but *Columella* countes that for the beſt Cheeſe, that hath leaſt mixture in it. The ſtrongeſt Cheeſe, and hardeſt of digeſtion, are thoſe that are made of Buffes Milke: the next are ſuch as are made of the Milke of Ewes, but the mildeſt, and lighteſt of diſgeſtion, are thoſe that are made of Goates Milke: the Cheeſe that is made of mares Milke, is of the ſame quantitie that the Buffe Cheeſe is. There is Cheeſe alſo made of Cammels Milke, and of Aſſe Milke: the Cheeſes that are made of Buffes Milke, are at Rome in great eſtimation of all other cattell. Such as are touched both aboue and beneath, and haue more then foure papps, you can make no Cheeſe of their Milke, for it will neuer curd. In our daies, the beſt Cheeſes are counted the Parmaſines, made about the Riuer of *Po*, eſtœmed for their greatneſſe, and daintineſſe, of which you ſhall haue brought into other countreys that way aboue threeſcore pound. Next are commended the Holland Cheeſe, the Cheeſe of Normandy, and the Engliſh Cheeſe. In England, the beſt Cheeſe is the Cheſſhyre, and the Shropſhyre, then the Banbury Cheeſe, next the Suffolke, and the Eſſex Cheeſe, and the very worſt the Kentiſh Cheeſe. The places where the beſt Cheeſe is made, appeareth by this olde engliſhe *Diſtichon*, better ſenſed, then fouted:

Banbury, Langtony, Suffolke good Cheeſe, Eſſex go thou by,
Shropſhyre, *cum* Cheſſhyre, Hertford may well with the beſt peere.

Of the diſcommoditie of Eſſex Cheeſe, our Engliſhe Martiall John Haywood, thus merily writeth:

I neuer ſaw Banbery Cheeſe thicke enough,
But I haue ſeene Eſſex Cheeſe quicke enough.

Cheeſe they ſay will beſt endure, and is longeſt preſerued, if you keepe them in heapes of Pulſe, or Wheate, and if you ſteepe your Rennet in the iuice of Byrch, you ſhall be ſure to haue neither Mite nor Creeper in your cheeſe. The Cheeſe that is ſoft and newe, doth more nouriſh then the dry, and be more comfortable to the ſtomack, not long in digeſting: the old is contrary, according to the prouerbe, No Cheeſe good but the newe.

Old

Old Cheese will become new in taste, if you lay them in Time, Vineger, or in Wine: if through age it be hard and bitter, let it be rubbed ouer with meale of vndried barley, & then dipt in water, and after, the outer rinde scraped of. We haue oft times proued, that hard Cheese wrapped in Cloutes wet in Vineger, or wine, and oftentimes sprinckled with wine, and so laide vp, returne to a softnesse, and a very pleasant taste. Some lay it in Leauen, couering it close therewith, and thereby make it soft. It is reported, that *Zoroastes* liued twentie yeeres in wildernesse with Cheese so ordered, as it neuer wared olde.

EVPHOR. Of the Whay that commeth from the Cheese, being sodde with a soft fire, till the fatnesse of the Cheese swim aloft, are made Welcurds. Welcurds.

HEDIO. You were wont to loue them well.

EVMEVS. I doe indeede, specially if there be good store of newe milke put into the Whay. The olde writers doe teach the making of a kind of white meate, not much vnlike to Welcurds, which they called *Melcan*, & made it in this sort. They put into a newe earthen vessell Vineger, and suffred it to boile softly vpon the fire, til the vessel had drunke vp the vineger, and into that vessel they powred in milke, and set it where it might stande stedfast, whereby they had within a while their desire. But me thinketh I haue for my part done enough, it commeth now to your turne *EVMEVS* to go forward with the rest. Melcan.

EVMEVS. That the keeping of Swine belongeth to Husbandrie, doth euidently appeere by the saying of the ancient husbandes, counting him a slothfull and an vnthriftie husband, that hath his Bacon rather from the Butcher, then from his owne Roofe: for there ariseth as great profite many times to vs of our owne Swine, as doth to you that bee keepers of greater cattell of your flockes: for if Bacon be away, the cheefest supporter of the Husbandmans kitchin is wanting. And wheras Swines flesh seemeth abhominable to ỹ foolish Iewes, I beleeue verily they neuer tasted the Gamonds of Fraunce, so highly commended by *Varro*, *Strabo*, *Atheneus*, and other learned writers: which I suppose were none other but the flitches of Westphaly, so greatly estemed at this day, not onely Swyne.

in Germanie, but in Rome, and that they were called by the names of Celtick Gamonds, because the old writers, specially the Grecks, called all the Countreys on this side the Alpes, both French and Dutch, by the name of Celtyck. Surely there is no beast besides, that makes more daintie dishes, there is in him nere fiftie different tastes, where euerie other beast hath but one: and hereof came at first the sharpe law of the Censors, forbidding it to be vsed at suppers, the Udders, the stones, the trypes, and the forepart of the heads of Swine, (as *Plinie* witnesseth.) And most apparant is it, that not onely the Frenche, and the Dutche in those daies, but also the Italians, and the Grecks, nourished great heardes of Swyne. Among the Grecks, *Homer* maketh mention of one of my name, that had twelue hogsties, euerie stie conteyning fiftie Porklinges, and *Polybius* writeth, of more then a thousand to be rered at a time among the auncient Italians, Tuskans, and French, *Varro* accounteth a hundred but a small heard. Who so will nourish Hogges, must haue regard both to the faireneſſe, and the age: *Varro* addeth beside, the nature to the kinde, and the countrey. And because the yong doe commonly resemble their parents, he woulde haue you chose such as are faire, and large bodied, and which makes most to the matter, as fruitefull as may be: which *Varro* doth chefely commende those that be of one colour, their bristels woulde be thicke, hard, and blacke, if it be in a colde countrey: if in a temperate, you may nourish the smoth. Their proportion would be long, large sided and bellied, wide buttocked, short legged, and foted, big necked, and well brawned, short groined, and turning vpwarde, his taile wrinckled. The kinde is most commended, that bringeth many Pigges, the countrey that breedeth large and great: the best age for the Boare, is a yere old, though at halfe a yere old they are able to serue a Sowe: one Boare is enough for tenne Sowes and more. The Sowe is sufficient to bring Pigges at a yere olde, and so for seuen yeres after, the fruitfuller she is, the sooner she wareth olde: at the first farrowing, you shall easely see what number she will bring forth: for she will not much differ in the other. The best kinde of Sowes haue twelue pappes, the

common

common ſorte tenne, or not ſo many. Euery Pigge doth know his owne Pappe that he was borne to, and ſucketh onely that and none other: if you take away the Pigge, the pappe drieth, as both *Plinie*, and experience sheweth. They were wont to be bought and bargained for in this ſorte. Doe you warrant that theſe Swine are ſound, that I ſhall well enioie them, that you will anſwere the faultes, and that they be of a healthy brēde? A wet moriſh ground, is meetest for this cattell, for he delighteth not in water, but in durt and myre, ſo much (as *Varro* writeth) that the Wolfe, as ſone as he hath caught a Sowe, draggeth her to the water, becauſe his teeth are not able to abide the heat of her fleſh. And although this beaſt wil away with any groūd, (for he feedeth both in mountaines, champion, and mariſh) yet his cheefe delight is in the Woods that is full of Quagmires, where there groweth ſtore of Oke, Corke, Beech, Maſtholme, wild Oliues, wild Dates, Haſelnuttes, Crabbe trees, Plome trees, and Chery trees: for theſe doe fruite diuers times, and feede the heards, almoſt all the whole yeere. Where there wanteth Woods, they muſt bee fedde from the grounde, wherin a Marriſh is to be preferred before a dry ground, that they may mouſell in the Marſh, digge vp wormes, wallow in the myre, and tomble in the puddels of water, which in ſommer is moſt needefull. They alſo hunt after rootes, ſpecially Fearne rootes, and the rootes of Bulruſhes, Ruſhes, and Sedges, beſide good Graſſe well feedeth a Swine, and Orchardes of Cheryes, Plomes, Apples, and Nuttes. And notwithſtanding all this the Barne, for you muſt feede them often by hande, when meat failes abroade, and therfore you muſt preſerue ſtore of Acorns, in Ceſtornes, in the water, or dried vppon ſmokie Flores, alſo Beanes, Peaſe, and Tares muſt bee giuen them, and not ſo much as Barly ſpared: for this kinde of feeding doth make them faire, and not onely fattes them, but giueth the fleſhe a pleaſant taſte. When they are yet yong and ſucke, both they, and their dammes muſt be well fedde, they muſt be put to feede early in the morning afore the heate of the Sun, and after kept in ſhadowy places, where there is good ſtore of Water. Afore they go to paſture, they muſt bee medecined, leaſt the Graſſe

ſkarre

skarre them too much, by which they will be greatly weakned. In Winter they must not be put abroad, till the frost be off the ground, and the yse thawed. And though the Swine wil runne at the knowen voice of their Swineheard, yet *Varro* will haue them be brought both to pasture, & homeward, with the sounde of a horne: their meate must bee giuen them scattered thin, so shall both lesse suffice, and the greater shall not harm the smaller: assone as they heare the horne, though they be neuer so farre of in the woods, they come running with all haste. *Polybius* telleth, that the Italians vse not to follow their heards, as the Greekes and other doe, but goyng a pretie waye before them, they blowe their hornes, their heards being acquainted with the blast, doe follow them in great order. They doe so wel knowe and obey the call of the swinehearde, if we may beleeue *Alianus*, that when certaine Rouers landing vpon the coast of Tuskan, and taking great numbers of them out of their sties, caried them aboorde, the theeues hauing weied vp their anker, and being vnder saile, the Swine vppon the hearing of theyr keepers voice, suddenly ran to the one side of the ship, and ouerturned her, whereby (the Pirates drowned) the Swine came safe to land to their maisters. As I haue here told you of the conditions of the Boare and the Sowe, and of their keeping, so wil I nowe shewe you the manner of their breeding. The breeming time is reckoned to be from Winter, till the twelfth of March, so shall you haue them to farrow in sommer: for the Sowe going foure monethes with pigge, farroweth in the fifth. Shee is with pigge at the first breeming, but they vse to let them go often to Boare, because they sone miscarrie. And if you wil haue two farrowes in one yeere, you must put your Sowe to Boare in Februarie, or Januarie, that she may farrowe by Aprill, or May, when as there is good pasture abroade, and milke is in his cheefe strength: and when they be weaned, they may well feede vppon strawe, and grottens, and after the Sowe may farrowe againe in the ende of *Autumne*: for *Varro* saith, her farrowing times are so diuided for the nonce, as she may farrowe twise a yeere, while she hath foure moneths to beare them, and two to feede them. As sone as they bee with Pigge, you must

A woonderfull knowledg in Swyne.

keepe

kæpe the Boze from them: foz with his vnrulineſſe, he maketh them to caſt. Yong Swine foz bzæde, muſt not bee leſſe then a yære olde, as *Varro* would haue it: howbeit they begin at eight moneths, & continue ſeuen yæres. The Boare beginneth at eight moneths, oz ſire, & continueth well foure yæres, and after at thzee oz foure yæres olde you may geld them, and fatte them. Some would not haue you kæpe vp aboue eight, others not aboue ſire: not that the Sowe is able to kæpe no moze, but that ſhe that kæpeth moze, ſone faileth. *Varro* repozteth, that the Sowe of *Æneas Lauinus*, farrowed at one time thirtie white Pigges: but it is monſtrous when ſhe farroweth moze then ſhe hath Pappes. Euery Sowe muſt haue her ſtie by her ſelfe when ſhe hath farrowed, and not ſuffered to goe with the whole heard, as other cattell are, but little Cotes to be made foz them, wherein they may be kept either farrowing, oz with farrowe: foz Swine, if they lie together in any number, being commonly ill manered, doe lie one vpon the other, wherby they hurt ſuch as are with pigge. And therefoze you muſt haue ſeuerall ſties where they may farrowe, and made hie, that the ſowe can not get out: foz couered they muſt not bee by no meanes, that the ſwineheard may loke that the Sowe ouerlay none of them, and to ſee what they want, that hee may make it cleane, and as oft as he cleanſeth it, he muſt ſtrawe ſand, oz ſuch like, to dzy vp the moiſture: foz though ſhe be but a ſwiniſh creature, yet loueth ſhe to haue her Chamber cleane. When ſhe hath farrowed, ſhe requireth greater quantity of meate, whereby ſhe may giue the moze milke, ſpecially Barley ſtæped in water, oz ground & tempered with water. And if you haue not good ſtoze of meate, your beſt is to ſell the pigges: ſo ſhall the damme being deliuered of her burden, bee ſoner with farrowe againe. Such as are farrowed in winter, are commonly poze & wzetched, both becauſe of the cold, and that their dammes do not like them foz wanting of milke, and biting their paps. If the Sowe eate her piggs, it is no wonder, foz ſwine of al other beaſtes, can worſt away with hunger, which when it pzouoketh, they eate not onely their owne, but yong childzen, which not long ſince happened, in Suſſex, to the pittiful diſcomfozt of the parent. A childe eaten by a Sowe.

They

They ſuffer not the Sowe to goe abroade in tenne daies after her farrowing, except it be to drinke: after, they ſuffer her to go about the houſe, that ſhe may the better giue milke. When the pigges ware gret, they deſire to go abroad with their dammes, at which time they are fedde by them ſelues aparte, to the ende they may the ſoner forgeat their Mother: which they will doe in tenne daies. It behoueth the ſwineheard to be carefull and diligent about his charge, that he haue in memory euerie one of them, both olde and yong, that he conſider euerie farrow, and ſhutte vp thoſe that be great with Pigge, that they may farrowe in their Stie. He muſt haue ſpecial regard of euerie yong Pigge, that euery one of them be brought vp vnder their owne damme: for if they gett out of the ſty, they ſtraightwaies mingle one company with an other, whereby the poore Sowe is forced to giue milke many times, to more Pigges then her owne: and therefore the ſwinherd muſt ſhut vp euerie damme with her owne Pigges. And if his memorie ſerue not to knowe them all, let him pitch euery Sowe and her Pigs with a ſeuerall marke: for in a greate number it ſhall behoue him ſo to do, for confounding his memory. The olde huſbands obſerued alwaies two times in the yeere for cutting of them, the ſpring, and the fall of the leafe, whereby they auoided the danger, both of the heat and colde. The Bore Pigges they cutte when they were ſixe monethes olde, and againe at foure yeere olde, to make them fat, making two woundes, and taking out the ſtone of euery ſide: or els when you haue taken out one ſtone, you muſt thruſt your knife againe into the wounde, and cutting aſunder the ſkinne betwirt both the ſtones, drawe out with your fingers the other, ſo ſhall you make but one ſkarre: but this kind of cutting is ſomewhat more dangerous. The Sowes are ſpaide by burning the Matrixe with an iron, & the ſkarre healed vp, whereby they will both haue no more Pigs, and be the fatter. *Ariſtotle*, and following him *Plinie*, would haue the Sowe after two daies faſting, hanged vp by the fore Legs, and ſo cut, whereby ſhe wil be the ſoner fat: but I iudg it better to cut them when they be yong, at two monethes olde, or yonger, for ſo are they in leaſt ieopardy. After they be cut, you muſt

kæpe them from drynke, and gyue them but little meat: the wound must bee annointed with fresh butter, and sowed vp. As the wrisling and turning vp of the tayle, is a signe of a sounde Hogge, so be there certaine and assured signes of their sickneſſe: for if you plucke off the brisles from the backe, and finde that their rotes haue blode in them, it shewes the Swine is not well. Besides if your Hogges be sicke, or taken with a feuer, they hang their heads a toneside, and suddenly as they runne abroade they staye, and being taken with a turning giddineſſe, they fall downe: and therefore you must marke well on which side they hang their heads, that you may cut the eare of the contrary side to let them blood: and vnder the taile beside, two inches from the Rompe, you shall strike the vaine, which there is easily to be seene, for the bigneſſe of it: you must first beate it with a little sticke, and after it swelleth with the beating, open it with your knife, and hauing bledde sufficently, binde it vp with the rinde of Willowe, or Elme: after this kæpe them vp in the house a day or two, and giue them warme water, with a good quantitie of Barly flowre. If the *Quinsey* or *Vuula*, (to which diseale this beast is wonderous subiect) chaunce to take them, *Dydimus* woulde haue you let them blood behinde aboue the shoulders, others vnder their tong, some againe cure them with settering. If the kernels swell in the throate, you must let them blood vnder the tong, and when they haue bledde, rubbe their mouths within with salt, finely beaten, and wheat floure. *Democritus* would haue you giue to euery Sowe, three pounde weight of the beaten Rote of Daffadyll. If they vomite and loth their meate, it is good to giue them before they goe abroade, the shauings of Iuory, with fryed Salt, and grounde Beanes: Swine while they fæde abroade, by reason of their great deuouring (for it is an vnsatiable beast) do wonderously labor with the abundance of the Splen: for remedie wherof, you shall gyue them water as oft as they thirst, in Troughes made of *Tamaryce*, the iuice of which wode, is verye holesome for them. *Democritus* teacheth to giue vnto Hogges that haue the Splen, the water wherein the Coles of Heath hath bene quenched. This beast hath somtime a sicknes wherin he pines away,

Of diſeases in Swine, & the cure.

The Quinsey.

away, and forsaketh hys meate: and if you bring hym to the fælde, hée suddenly falleth downe, and lieth as it were in a dead sléepe: which as soone as you perceiue, you shall shutte vp the hole herde in some house, and make them to fast one day, both from water and meate: the next day, the rote of the wild Coucumber stamped and strained with water, is giuen them to drinke: which as soone as they haue taken, they fall a vomitting, and so purge themselues. When they haue thus expelled their choler, you shall giue them harde Beanes, strained with Wine. An excellent medecine against all pestilence of Swine, doth *Hieronimus Tragus* teach, which is when you sée them infected, to giue them the Rootes of *Polipodi*, or Oke Ferne boiled in Wine, whereby they shall purge what soeuer is euill from them, and most of all choler, wherewith Swine are most troubled: the same *Hieronimus* (as I remember) teacheth for a Horse (though it bée without my commission to meddle with them. If hée be sicke, and suddenly fall downe of a disease that you knowe not, to put vnder his tong a péece of a Ferne rote, whereupon you shall sée him immediately voide vpward and downewarde whatsoeuer is in his bodie, and presently amende: this hée saith (and truely I dare beléeue him) that hée proued with a horse of his owne. But to my Swine, whereas thirst in Sommer, is hurtfull and dangerous to all kind of cattell, to this beast it is most hurtful, and therfore you must not water them as you doe shéepe and Goates, but twise, or thrise a day: but if you can, you must kéepe them by the water side, that they may go thereto at pleasure: for the Swine is not content with drinking, but hée must often cole and plonge his filthy panch in the water: neither delighteth he in any thing so much, as to wallow in the durt. And if you haue no such places néere, you must draw some water from the Wel, and giue it them in Troughes aboundantly: for except they drinke their fill, they will fall sicke of the Longes, which disease is cured (as *Columella* writeth) by thrusting the Rote of Setterwort through their eares: *Plinie* affirmeth the Tode to be a present remedie for the sickneſse of Swine. Some say, that if a Sowe lose one of her eies, shée dieth soone after: otherwise she liueth fiftéene yéeres.

yeares. There is a kinde of diſeaſe amongſt Swine (though otherwiſe they be healthy and fatte (wherein their fleſh is all infected with little graines as bigge as Peaſon: the Grecians call them *Calazos*, and we at this day meaſled Swine, which you ſhall ſone perceiue by the ſight of the tongue, and the horſeneſſe of their voice: this diſeaſe they ſay, is naturall vnto them, from which you ſhall perceiue them, if you naile certaine plates of lead in the bottome of their Trough. You ſhall alſo keepe them from this diſeaſe, if you giue them to drinke, the Roote of Briony: the generall and common remedie, is Alome. Brimſtone, and Bay berries, of eache alike: adde thereunto a handful of Swte, beate them all together, and put them in a Bagge, which bagge you ſhall caſt into their water when they drinke, and renue it twiſe in the yeere. Meaſled Swine.

EVPHORB. I pray you *EVMEVS* do not diſſemble, but tell vs truely how you dw to haue your Hogges ſo fatte. I beleeue you are in the Barne ſometime when you ſhould not be.

EVMEVS. What meanes ſoeuer I vſe in ordring my flocke, is not to my Maſters loſſe, no more then is your diligence, whereby you bring your cattell to be ſo faire. I told you before, that he was an vnthriftie huſband that had his Bacon from the ſhambles, and not of his owne prouiſion: and beſids, my Maſters the Phiſitions giue great cõmendations to hogs fleſh, in that it hath ſuch a neareneſſe and agrement with our bodies, neither is their (as I ſaid before) a beaſt that makes more diſhes. And therefore it is greatly for profite, to haue the huſbandmans kitchen well ſtored with Bacon, wherewith he may ſuſtaine his houſhold all the whole yeere. You ſhall eaſily (though woods be wanting) find Barnes, Marſhes, and Corne fields to feede them with. They will be fatte (as *Plinie* ſuppoſeth) in threeſcore daies, ſpecially if they be kept from meate three daies before you feede them: they are fatted with Barly, Otes, or other Corne, or pulſe, either giuen whole, or ground, but of all others, beſt with Maſt: and that fleſh is better, and of more ſubſtance that is feede with Acornes, then that which is fatted with either Beece maſt, or Cheſtnutte. This beaſt will in time be ſo fatte, as hee will be able neither to goe, nor ſtand.

Yea

Yea *Varro* telles, that there was ſéene in *Arcadia* a Sowe ſo fatte, that ſhe was not only vnable to riſe, but ſuffered a Mouſe to make a neſt in her body, and to lay her young there. The ſame *Varro* repoꝛteth, that there was ſent to *Volumius* a Senatour of Rome, a péece of Poꝛke of two Ribs, that waied thꝛée and twentie pound: the thickneſſe of which Sowe from the ſkinne to the Ribbe, was one fote and thꝛée inches. Your beſt is to put to fatting your Swine of two oꝛ thꝛée yéeres olde: foꝛ if they be younger, their growing will hinder their féeding. To kéepe your Bacon any long time, you muſt vſe greate diligence in the ſalting and dꝛying of it, whereby you ſhall haue it both holſomer and ſwéeter, and beſides to continue diuers yéeres to ſerue the turne, if ſcarſitie happen. Your Hogge béeing in this ſoꝛt fatted, you muſt ſhut vp, and not ſuffer him to dꝛink the day beforꝛe you kill him, whereby the fleſh will be the dꝛier. When you haue thus after his thurſt killed him, you ſhall either ſkald him with water, oꝛ with a flame made with ſtrawe, oꝛ ſtickes, ſyndge him: foꝛ the maner of ſuch as flea him, I like not. After that, hanging him vp by the héeles, you ſhall plucke out his bowels, and put them to dꝛeſſing: his fleſh being cold, and hard, you ſhall lay vppon a table, and cutting out the Head, the Gammon and the fléetches, pouder them with ſalt, thꝛuſting great ſtoꝛe thereof in euery place, ſpecially where the bones bée: that donne, put it into your pouldꝛing tubbe, ſtrowing ſalt enough vnder it: ſome would haue you ſalt in the wane of the Moone. Beforꝛe you pouder it, you muſt pꝛeſſe and dꝛy out all the blood and the Water. Some beforꝛe they ſalt it, doe plucke out the bones, thinking it the beſt way foꝛ pꝛeſeruing it, and to kéepe it longeſt ſwéete. Others againe do not ſtraightwaies put it into the pouldering tubbe, but doe leaue it vpon a Table foꝛ ten daies after, and then hang it vp in a pure ayꝛe, to dꝛy in the larde. And when it hath béen dꝛied in the winde certaine daies, by little and little, they let the ſmoke come to it, and afterwards moꝛe aboundantly. The Bacon will bée the ſwéeter, if beſide the ſmoke, the winde may come to it: if you hang it in greate ſmoke at the firſt, it will be ruſtie. *Dydimus* ſaith, that the Bacon will long continue ſwéete, if after the dꝛeſſing, cooling, and

dꝛying,

drying, it bee hanged vp in shadowy and moist places, rather toward the North, then toward the South, and that it will be sweeter, if it be couered with Snowe, and Chaffe: the Tubbes that you poulder in, must bee such as haue had Oyle in, rather then those that haue had Vineger. Although I haue before spoken of the worthinesse and antiquitie of Shepheardes, and Heardsmen, yet must I here say, that it is in vaine to meddle with the ordering and keeping of cattell, except you haue handsome, and skilfull men that may take the charge. For the knowledge of keeping of cattell hath a discipline, wherein a man must from his very Childhood be brought vp: and surelie it is meete that the husband, or Bayliffe, haue ben brought vp, or trained in all these trades, and to come by degrees to his masters prize: As from a swineheard, to a sheepheard, from a sheepheard, to a Neatheard, &c. And most true it prooueth in this that commeth to passe in all other gouerments, that such are best able to take charge of gouernment, that passing by degrees and offices, haue from beeing vnder gouernment, come to gouerne themselues: for though (where the flocke is but small, and feeding not farre of, is brought whom euery day) Children and yong folkes, are able to serue the turne: yet where the flockes bee greate, and must be kept night and day in Forestes, and wilde feeldes (as I said before) of the flockes that winterd in *Appulia*, and sommered in the Mountaines of *Kiete*, here I say the shepheards must both be men of lustie age, strength, and diligence, as also skilfull in that belongeth to their office: for neither olde men, nor children, are able to endure the hardnesse of climing the hilles, nor the sharpnesse of the colde Mountaines, which they must alwaies doe that followe their flocke, specially they that kepe Bullockes and Goates, that delight to feede vppon Rockes, and Cliues. You shall see on the Mountaines of Swycherland, great and goodly fellowes furnished in warlike maner to followe their heardes and flockes, and to lodge in the wilde desartes, farre from the companie of men, and there also to make both Butter and Cheese: wherfore such as are meete to take charge in these places, must be light, swift, & well limmed, and not only well able to followe their flockes, but if neede be to

Of shepheards.

defend them from wilde and rauening beasts, to lift great burdens, to followe the chase, and to be good archers: in fine, such a one as *Homer* doth make his *EVMEVS* to be. And therfore the old husbandes in hiring of a shepehearde, did alwaies couenant among others, that he should be sound of body and limme, and free from filching and theft. In *Sclauony*, the heardsmen doe vse to haue their Wiues abroad with them, as companions of their iourney to dresse their meate, and such thinges as they neede: such things as are for the health of his beasts, the shepeheard must haue alwaies in a readines. *Varro* would haue him both for this purpose, and for the better order of his recknings with his master, to write and read. Of the number of the herdsmen, howe many euery flocke ought to haue, is to be measured by the Countrey, and kinde of the Cattell. The same *Varro* alloweth for euery fourescore Goates one shepeheard, which *Aticus* alloweth to a hundred, to euery fiftie Mares two men: in our Countrey one shepehearde suffiseth for a hundred, or two hundred shéepe, yea many times for three hundred, and aboue, specially where they be euery day brought home. One swineheard wil kéepe twenty, or thirtie hogs, or more, if the grounde bée thereafter, the like for Bullockes and kine. For Horses we séeldome haue heardsmen, but euery man kéepeth them at home either in stables, or pastures, not commonly exceéding the number of twentie. In what order you shall féede your cattell, either in Sommer, or in Winter, and when towards the South, and when to the West, I haue told you before. The Dogges. Dogge (though the Lawyer alloweth him not in the number of cattell) and though he yéeldes of himselfe no profite, yet is he as the shepeheard (for his trustines, & watching of the flocke) to be estéemed, and set by: for they haue béene séene to fight in the defence and quarel of their master. Yea diuers of them haue béen knowen after their maisters death, vppon great affection and loue, to famish themselues, whereupon the price of good Dogges grewe to be very great. It is written, that *Alcibiades* gaue for one Dogge, eight score pounds. There is not a more necessarie creature, then the Dogge about Husbandry: for beside his singuler faithfulnesse and watching in the night time,

he

he is also a quarter master in kæping of the Cattell, and verie nædefull for the defence of them specially Shæpe and Goates, which woulde be sone destroied by Wolfes, Foxes, Grayes, and other vermine, if Dogges were not set to be their kæpers. Swine fæding in heardes, if the wilde beastes inuade them, making as it were a *larum* with their grunting and crying, assemble themselues in their owne defence. The greater cattell defende themselues sone with their hæles, some with their Hornes, onely the poore Shæpe hath no Souldier but the Dogge. Of Dogges that serue for profite, there are but thræ sorts: for of the fourth (which are but for pleasures) I make no account. One of the sortes, is such as by sent, or swiftnesse serue for the chase, and killing of wilde beasts: these, what maner of ones they shoulde be, and how they shoulde be ordred, *Xenophon* and *Oppianus*, in their *Cynigetickes* haue taught, and I in my last booke, where I shall speake of hunting, will declare. But now I will onely speake of Dogges for the husbands, and kæpers both of the House and the Cattell: and first of the Mastie that kæpeth the House: for this purpose you must prouide you such a one, as hath a large and a mightie bodie, a great and a shryll voice, that both with his barking he may discouer, and with his sight dismay the Thæfe, yea being not sæne, with the horror of his voice, put him to flight. His stature must neither bee long, nor short, but well sette, his head great, his eyes sharpe, and fierie, either browne or graie, his lippes blackishe, neither turning vp, nor hanging too much downe, his mouth blacke and wide, his neather rawe fatte, and comming out of it of either side a fang, appearing more outward then his other teeth, his vpper teeth euen with his neather, not hanging too much ouer, sharpe, and hidden with his lippes, his countenance like a Lions, his breast great, and shaghaird, his shoulders broad, his legges big, his taile short, his fæte verie great, his disposition must neither be too gentle, nor too curst, that he neither fawn vpon a thæfe, nor flæ vpon his friends, very waking, no gadder abroade, nor lauish of his mouth, barking without cause, neither maketh it any matter though he be not swifte: for he is but to fight at home, & to giue warning of the enimie.

The Bandogge for the house

The Shepeheardes Masty.

The Dogge that is for the folde, must neither be so gaunt nor swift as the Grayhounde, nor so fatte nor heavy as the Masty of the house, but verie strong, and able to fight and follow the chase, that hee may bee able to beate away the Wolfe or other beasts, and to follow the theefe and recouer the pray, and therefore his body would rather be long, then short and thicke: in all other points hee must agree with the Bandogge. Touching the kinde, the Dogge is thought better than the Bitche, because of the trouble shee bringeth when shee is sawte: howbeit, the spaide Bitches do bite soreest, and are more waking. For their age, they must neither bee whelpes, nor too olde: for the whelpe can neither defende himselfe, nor the flocke, where as yet the olde hath some vse about a house. If you haue a whelpe (which age is better to be trained, either for the house or the folde) you shall perceiue by his foote whether hee will be great or no. His head must be great, smoth, and full of vaines, his eares great, and hanging, his iointes long, his forelegges shorter then his hinder, but very straight and great, his clawes wide, his nailes hard, his hoele neither fleshy nor too hard, the ridge of his backe not too much appearing, nor crooked, his ribs round and well knitte, his shoulder pointes well distant, his buttockes fatte, and broade, and in all other parts (as I saide) of the Bandogge before. For his colour it maketh no great matter, though *Varro* would haue him white, and so would *Columella* the Dogge for the fielde, as he woulde haue the house Dogge to be blacke: but the pied colour is iudged naught in them both. The white they cõmende, because he may be discerned from the wolfe in the night, whereby they shall not strike the Dogge in steede of the wolfe. The blacke againe for the house, is best commended, because of his terror to the theefe in the day, and the hurt that he may doe by night, by reason of his not being seene: the dunne, the branded, and the redde, doe not mislike mee, so they be well marked beside. Thus must you iudging him as a lion by the clawe, either bie one, or bring vp one for your purpose. Howe much teaching, or bringing vp preuaileth, appeareth by *Lycurgus* his example in *Xenophon*. To make them fierce and curst, you must plucke them by the eares,

the liue ones. While the Bitch hath Whelpes, you must fede her rather with Barly bread, then wheaten breade: for they prosper better with it, and makes them giue more mylke. You must fede them thryse a day, in the morning when you tie them vppe, at noone, and againe at night, when you let them loose. Their names that you giue them, must be short, that they may soone heare when they bee called. The Grekes, and the Latines, gaue them names of two syllables, the Germanes lightly but one syllable, as Ball, Slut, Patch, Grim. &c. Although *Columella* would not haue their names vnder two syllables, shewing for example the names of Dogs among the Grekes, & the Latines, as σύλαξ, ῥόμη, αλκη, λάκαινα, and *Lupa, Tigris, Cerua: Xenophon* reckoneth vp thousands all for the most part of two syllables. The diseases and grieuances of Dogges, are the byting of Flies, Tyckes, and Manginesse. Against this you must washe them, when they bee Whelpes, with bitter Almonds stamped, and strained with water, washing them both about their Eares, and betwirt their Clawes, that neither Flies sticke to them and blister them, nor Tyckes or Lyce molest them: and if they be alreadie mangy, you must annoint them with Tarre, and Hogges grease: the Tyckes also, if you touch them with this medecine, will presently fall off, for you must not plucke them of by force. If your Dogge bee full of Fleas, the remedy is Cummin beaten with a like quantitie of neesing pouder, and mingled with water, rub him ouer with it, or the olde dregges of Dyle rubbed ouer all his bodie. If he be scabby, take *Cythisus*, and *Sesamum*, beate them together, and mingling them with tarre annoint the sore: this medecine wil also remedy a christian creature. They say also, that if you thrust the skinne through with an iron, it will heale the manginesse, or if you smear them ouer with Gunne pouder, or cast them into a Tanners fat. *Aristotle* writeth, that Dogges are chefely troubled with three diseases, Madnesse, Quinsey, and the Goute, and whatsoeuer he byteth in his madnesse, becommeth also mad, and dieth thereof: the madnesse is most extreame in the Dogge daies: whatsoeuer is bitten by them, falleth straightwaies into a loathing, and feare of Water.

Fit nams for dogs.

To preserue them from it, you must mingle with their meate for thirtie daies together, or if they bee alreadie infected, giue them neesing pouder to eate. *Plinie* writeth, that there is in the tongs of Dogges a little worme, called of the Grekes *Lyrta*, which if it be taken out while they bee whelpes, they wil neyther bee madde, nor gredie, or rauenous. If the Dogge bee madde, hee refuseth both meate, and drinke, and driueleth ilfauoured fomie matter, both from his nose, and mouth, he loketh with a lothsome countenaunce, his bodie is leane, and more clong together then it was wont to bee, hee beareth his tayle betwirt his legs, and biteth without any barking whatsoeuer he metes, falling as well vpon men, as beasts, making no difference betwirt his frendes, and strangers. As the Dogge is a watchman and keeper of the house and the flocke, so the Cat is also a houshold seruaunt to be cherished. The Egyptians for their profitablenesse, did worship for their god a golden Catte, for whereas Rats and Mise, as wel in Cities, as in Granges, are greatly hurtfull, we keepe vp Cattes for the auoiding of the mischiefe, neither is there a spedier remedie. The Catte is a beast of nature eniny to the mouse, watching in the night, and sleeping in the day, stealing suddenly and swiftly vpon the mouse: she seeth better by night, then by day (as *Alexander Aphrodiseus* writeth) her eies shine and glister in the darke. They goe a Catterwalling about Februarie, and other times in the yeere (for they often ingender) & bring forth their yong ones blinde, as the Bitch doth. *Herodotus* saith, that after the Catte hath kitned, she commeth no more at the Bucke, which when he perceiueth, and cannot haue his purpose, he killeth the yong, whereof when she seeth her selfe bereft, for very desire of yong (whereof this kinde is most desirous) she cõmeth straight to the Bucke. For my part I would rather counsell you to destroy your Rattes and Mise with Traps, Banes, or Weesels: for besides the sluttishnesse and lothsomnesse of the Catte (you know what she laies in the malt heape) she is most dangerous and pernitious among children, as I my selfe haue had good experience.

Madde Dogges.

Cattes.

Soli deo honor & Gloria.

The end of the third booke.

eares, set them together with your handes, and kæpe them from being hurt: so shal you haue them the bolder, and the fiercer, and such as will neuer giue it ouer. You must vse him first to the chaine, by tying him to a clogge, letting him drawe it a while by his necke, and when you haue a little space vsed him in this sort, then may you either leade him, or tie him: it is best to kæpe them tied in the day time, to make them the curster, and to let them lose in the night time: so shall they in the night time watch, and in the daie sleepe. To arme them against the Wolfe, or other wilde beastes, you may put broade collers about their Neckes full of Nayles, and iron studdes, lyning it with soft leather within. You must loke that your Dogges bee of a good kinde, and (if you can) all of one kinde, so shall they sticke the better together: chose them that haue the curstest Dammes, and such as haue their Pappes euen. They begin to litter at a yeare olde, and continue nine yeares, after tenne they be worth nothing. The Dogge (as *Columella* saith) gettes whelpes lustily, till he be tenne yeares olde: the whelpes of old Curres, are slowe, and naught. *Homer* seemeth to make the life of a Dogge, aboue twentie yeares, where he speaketh of the comming home of *Vlysses*, and the knowledge of his Dogge: And I my selfe haue seene Dogges that were saide to bee so much, but altogether vnprofitable. Their age may be knowen by their teeth, the yong hauing (as *Aristotle* saith) white teeth and sharpe: the olde, blacke and blunt. In the Spring they begin to be sawte, and go with whelpe (as *Aristotle* and *Xenophon* saith) threescore daies, or at the most threescore and three. *Varro* writeth, that they go three moneths with yong: the Dogges of *Lacedemon* ingender at eight moneths olde, and all other Dogges also at halfe a yeare: they are with whelpe at once limyng: they litter about June: when they bee littered, they are blind, and the more milke they haue, the longer it is before they see, but neuer longer then one and twentie dais, nor sooner then seauen daies. Some holde opinion, that if there be but one at a litter it will see the ninth daye, if two, the tenth day, and so a day added for as many as be, and that those that be of the first litter, doe soonest see: the best of the litter, is that

which last seeth, or which the Bitche first carieth to her Bennell. As sone as they be Whelped, cast away such as you mislike: of seuen, keepe three or foure: of three, two: while they be yong, at the first they must be suffered to play with the dame, that they may growe the better, afterward, let them be taught, and tied (as I tolde you) tying them in the day, and letting them lose in the night, and such as you knowe to be of a good kind, and would haue them prone well, suffer them not to sucke a strange damme: for the milke and blood of the mother, is of greate force to the goodnesse and growth of the Whelpe. And if so be the Bitche lacke milke, suckle them with the milke of a Goate, til they be foure moneths olde. Lay vnderneath them in their Bennels Strawe and Chaffe, that they may lie warme: for they can not well away with cold. You must cut the tailes of the Whelpes, when they be sire weekes olde, in this maner, there is a sinnowe that runnes from the ridge of the backe, to the tippe of the taile, which being held fast with a pincer, and a little drawne out, you shall cut a sunder, wherby neither the Taile shall growe to any foule length, nor the Dogge shall at any time after (as they say) be madde. They are thought to lift vp the legge when they pisse, at sire monethes olde, which is a signe of the perfectnesse of their strength. The feeding of both kindes is all one, they may be fedde with bones, porredge, and such like: in any wise let them want no meate, for if they doe, they will for hunger rauen abroad, and forsake both the house, and the flocke. *Xenophon* woulde haue you giue them milke all the yeere long, and such foode as they shall feede with all their life time, and no other thing: if you feede them too full, it will breede (as he saith) diseases in their legges, and rotte them within. Bread is their common meate, but *Varro* would haue it giuen either with Milke or Whay, by vse whereof, they will neuer forsake their Cattell. You may giue them beside, breade, with the broth of sodden bones, and the bones themselues browsed, which will make their teeth the sounder, and their mouthes and iawes wider, and they will bee the keener, by reason of the sweetnesse of the Marrowe. You must beware they eate no dead sheepe, least by reason of the taste, they fall to

the

they be free from spurres: for such as weare those Turkish weapons, are not good for brode, and disdaine the companie of the Cocke, and lay but seldome, and when they sitte, with their vnruely spurres they breake their Egges. The little Pullets, or Hennes, though the olde age, both for their vnfruitfulnesse, and other causes disalowed them, yet in many places they proue to be good, and lay many Egges. In England at this day, they are vsed as a daintie dishe at mens tables. In the choise of your Cockes, you must prouide such as will treade lustily, of colours, as I tolde you for the Hennes, and the like number of talons, and like in many other pointes, but of stature they must be hier, carrying their heads straight vp, their Commes must be ruddy and hie, and hanging, nor falling downe, their eyes blacke and sharpe, their Billes short and crooked, their eares greate and white, their wattells orient, hauing vnder them as it were a kind of grayish beard, the Necke feathers of colour diuers, either a pale, golden, or a glistering greene, which must hang rusling from his Necke, to his shoulders, their Breastes must be large, and well brawned, their Winges well feathered and large, their Tailes dubled and flagging, their rumpes and thyes full of feathers, their legges strong, wel armed with sharp and deadly Spurres: Their disposition (for you shal not neede to haue them great fighters) would be gentle, quicke, and liuely, and specially good wakers, and crowers: for it is a Byrde that well aporcioneth both the night and the day, and (as *Prudentius* witnesseth) exhorteth to repentance. Neither must you on the other side, haue him a Craddon, for he must sometime stand in the defence of his wife and his children, and haue stomacke to kill or beate away a snake, or any such hurtful vermine: but if he be to quarrellous, you shal haue no rule with him, for fighting and beating his fellowes, not suffering them to treade, though he haue more then his handes full him selfe. This mischiefe you may easily preuent, with shackling him with a shoe sole: for although such lustie fighters are bredde vp and cherished for the game, yet are they not to serue the Husbands turne at home. A Cocke framed and proporcioned after this sort, shall haue fiue or sixe Hennes going with him.

The choise of Cockes.

MELI.

MELI. I pray you let me vnderstande what time of the yeere is best for bringing forth of Chickins?

PULLA. In some places, specially the hottest countries, the Hennes begin to lay in Januarie, in colder countries, either in Februarie, or at the latter end of January: you must also further their laying, by giuing them meates for the purpose, as Barly halfe sodde, which maketh both the Egges the fayrer, and causeth them to lay the oftner. Some thinke it good to mingle therewith the leaues or the seedes of *Cytisus*, which both are thought to bee greatly of force in making them fruiteful. If this be not to be had, you may supply the want with *Spery*, or (as *Cardanus* saith) with Hempseede, which will cause them to lay all the Winter. When they lay, you must see that their nestes bee very cleane, and kept still with freshe cleane strawe: for otherwise they will bee full of fleaes, and other vermine, which will not suffer the Henne to be quiet, wherby the Egges doe not hatch euen together, or many times ware adle and rotten. The Egges that you sette vnder them, must bee newe laide, howbeit, so they be not aboue tenne daies olde, it maketh no great matter: if you loke not to them, they will straightwaies sitte after their first laying, which you must not suffer, for the yong Pullets, are better for laying then sitting: the desire of sitting is restrained, by thrusting a fether through their nose. The old Hennes must rather be suffered to sit, then the yonger, because of their experience. Herein must you haue a speciall regarde to knowe which be best to sit, for some be better to bring vppe Chickins then to sitte. Others againe will either breake, or eate vppe both their owne Egges, and their fellowes Egges: such you must put aside, and if their Nayles and Billes bee sharpe, rather employ them in brooding, then in sitting. *Democritus* telleth, that Chickins may bee brought forth without setting vnder the Henne, if so bee the doung of Hennes, sifted verye fine, be put in little bagges, basted about with soft feathers, vppon which the Egges must be laid straight vpright, with the sharpe ende vpwarde: vppon these againe must the like quantitie of Hennes doung be laide, so that they bee of euery side closely couered.

This

¶ The fourth Booke, entreating of Poultry, Foule, Fiſhe, and Bees.

PVLLARIVS. *CHENOBOSCVS.*
MELISSEVS. *PISCINARIVS.*

AS kæping and bræding of Cattell, doth yæld no ſmal commoditie and gaines to the huſbande, ſo the nouriſhing & maintenaunce of Poultry, Foule, Bées, and Fiſh (if the countrey be for it) doth commonly ariſe to his great aduauntage, wherby both the reuenue is greatly encreaſed, and the table daily with dainty, and no chargeable diſhes furniſhed. Cages, and houſes for Birdes, wherin were kept al maner and ſortes of Foule, were firſt deuiſed by *M. Lelius Strabo* at *Brundiſium*, from which time it was firſt put in vſe, to pen vppe ſuch creatures, as naturally were accuſtomed to flée at their libertie in the aire. At which time alſo began to be brought in ſtrange & outlandiſh Foules, the kæping and bræding whereof, yældeth to the huſband both pleaſure and profite. We haue here brought in *PVLLARIVS, CHENOBOSCVS, MELISSEVS*, and *PISCINARIVS*, euery one of them ſeuerally entreating of ſuch things as belongeth to his charge. *PVLLA*

MELISSEVS. I ſée you haue here (*PVLLARIVS*) great ſtore of Foule, and Poultry, and I beléeue verily, the profite and commoditie of them, wil not quite half the charges they put you to.

PVLLARIVS. Yes verily they quite your coſt, whether you ſell them, or kæpe them for the Kitchin. It is ſaide, that *Auidius Lurco* made yærely of his Poultrie and Foule fiue hundred pound.

MELLISSEVS. But I do a great deale better like the common Poultrie, that we kæpe about our houſes.

PVLLARIVS. We haue alſo of the ſame here at home with vs.

MELIS-

MELLISSEVS. Then let me vnderstād (I pray) in what order you kæpe them, for herein you sæme to be most skilfull.

PVLLARIVS. It is mæte that euery one be skilfull in that trade that he professeth. If you will I will not refuse to shew you that little cunning that I haue: so you on the other side vouchsafe to shewe me the ordring of your Bées.

MELLISSEVS. I will not stick with you for that, to tell you the best I can.

PVLLARIVS. Well then with a good will I declare vnto you my knowledge, beginning first with those kinds that are most in vse: for amongst all other houshold Poultry, the chæfe place is due to the Cocke and the Henne, that are beside so common, as the poorest widdowe in the countrey is able to kæpe them. In this Birde there are thrœ points of natural affection chæfely to be wondred at. The first, the great carefulnesse that they haue during the time of their sitting, wherein for the desire of hatching their yong, they sæme to be careless of either meate or drinke. Secondly, that they beare such loue to them, as they sticke not to hazard their owne liues in the defence of them. And thirdlie, that in the storme, great colde, or sickneſſe, they preserue and nourish them vnder their winges, not making for the while any account of their owne selues. There is hereof a most swæt comparison in the Gospell, wherin our Sauiour *CHRIST* compareth himselfe to the Henne that gathereth her Chickins vnder her winges. And therefore, since these are common for euery man to haue, and that they alwaies fæde about the house, I thinke it best to beginne with them, and to tell you which are best to bæ liked, which to be brought vp, and which to be fatted. First, the best to be brought for browde, are the dunne, the redde, the yellow, and the blacke, the white are not to be medled with, because they are commonly tender, and prosper not, neither are they besides fruitefull, and are alwaies the fairest marke in a Hawke, or a Bussardes eie. Let therefore your Henne be of a good colour, hauing a large bodie and brest, a great head, with a straight redde and dubble comme, white eares & great, her tallons euen. The best kinde (as *Columella* saith) are such as haue fiue clawes, so that they

The choise of Hens for brood

This done, you muſt ſuffer them to lie for the two or three firſt daies, and after, euery daye turne them, taking good heede that you knocke them not one againſt the other in the turning. After twentie dayes, you ſhall finde the egges broken: and therefore the twentieth day, plucking away the ſhels: and taking out the Chickin, you may commit them to the Henne. It is written, that Chickins haue been hatched by the continuall warmth of a womans boſome: beſide it hath beene ſeene, that egges being laide in an Ouen, or warme place, couered well with Strawe and Chaffe, hauing a little fire beſide, and one to turne them continually, haue diſcloſed and broken at their accuſtomed time. *Ariſtotle* writeth, that Egges put in warme veſſelles, or couered with doung, wil hatch of themſelues. The number of the Egges that your Henne ſhall ſitte vppon, ſome woulde haue to be odde, and not alwaies alike, but in January and Februarie fifteene, and no more, in March nineteene, and no leſſe: which number you ſhall continue all the Sommer, til September, or October, after which time it is to no purpoſe to breede any longer: for the Chickins, by reaſon of the cold weather and diſeaſes, neuer proſper. Yea ſome be of opinion, that after the tenth, or twelfth of June, you ſhall neuer haue faire brode, and that the beſt ſeaſon for ſitting, beginneth at the tenth of March. And herein you muſt alwaies be ſure to haue the Moone encreaſing, from that ſhe be tenne daies olde, till fifteene: for that is the beſt time to ſitte in. And ſo muſt you againe diſpoſe the time, as the hatching may fall out in the encreaſe of the Moone: for the iuſt time of hatching, there are ſundry opinions. *Ariſtotle* writeth, that they are hatched in nineteene daies, *Varro* (for Chickins) one and twentie daies, or twentie daies, for Peacockes and Geeſe, ſeauen and twentie daies, and ſometimes more: Duckes, in the like ſpace to the Henne, ſpecially if they ſit night and day, allowing them onely the Morning, and the Euening to feede: which times they muſt of neceſſitie haue. If ſo be you will ſet vnder your Henne Peacocks Egges with her owne, you muſt ſet her vppon the Peacocks Egges, ten daies before ſhe haue her owne Egges, whereby they ſhall be hatched all at once, neither muſt you ſet

aboue

about fiue Peacockes or Gose Egges vnder a Henne. If you
To haue Cocke-chickins, or Henne chickins.
woulde haue all Cocke Chickins, you must chose such Egges as be longest and sharpest, as again (for Hennes) the roundest, (as both *Plinie* and *Columella* write) though *Aristotle* seeme not of that opinion. To vnderstande which be good Egges, which not, you must (as *Varro* teacheth) put them in water, and such as be naught, will swim aloft, and the good goe straight to the bottome. Others do hold them vp against a Candle, and if they see through them, they iudge them light and naught. You must in no wise shake them, or shogge them, least you breake the stringes of life, that are but newly begunne: it hath been seene, that by shaking of the Egges, the Chickins haue been hatched lame. We may beside perceiue whether the Egges will proue well or no, if foure daies after the Henne haue sitten, you hold them vp in the sunne, or other light, and if you see that they be cleere, cast them away, and put other in their places. Against
Against hurt of thunder.
thunder, that many times marreth the Egges, some doe sette about them the Leaues or Branches of Bayes, or Bentes, or Grasse, others (againe) the heades of Garlicke, and nailes of iron. In the great heate of the Sommer, you must nowe and then sprinckle the Egges a little with water, and wet them, least by the extreame heate they ware drie and adle, speciallie the Egges of Turkeies and Hennes. Whensoeuer you meane to make cleane their nestes, you must take vp the Egges, and lay them tenderly in some little Basket, and so laye them spedily againe in the cleane nest: neere to the place where the Hen sittes, you must sette water, and meate, that they may better keepe their Nestes, and that by their long absence the Egges ware not colde. And although the Henne doth alwaies turne her Egges, yet it behoueth you when she is from the nest to turne them softlie with your handes, that by receauing a like warmth, they may the soner bee readie. And if she haue happened to bruske any of them with her feete, you must presently remoue them. At the nineteenth day, you must loke diligently whether the Chickins doe iobbe the shell with their billes, and hearken whether they pepe: for many times by reason of the hardnesse of the sheil they cannot come forth, and therfore you must

must helpe them out with your handes, and put them to the Henne, and this you must doe no longer then thrée daies: for the egges that after one and twentie daies make no noise, haue nothing in them, and therefore you must cast them away, that the Henne lose not her labour. Vppon the twentieth day, if you sturre the egges, you shall here the Chickin, from that time beginne the Feathers, the Chickin lying so, as the head resteth vppon the right foote, and the right wing lieth vppon the head, the yolke vanishing by little and little away. You must not take the chickins away as they be hatcht, but suffer them to remain one whole day with the Henne in the Nest without meate or drinke, till such time as they be all hatched. It is wonderfull, and yet the experience séene, that before they be suffered to eate they take no harme, though they fall from a great height. The next day, when all the flocke is come forth, *Columella* would haue you to put them vnder a Siue, and to perfume them with the smoke of peniriall, or to hang them in a basket in the smoke, which preserueth them (as it is thought) from the pippe, which many times destroieth the poore Chickin: then must you put them into Coope with the Henne, and fede them at the first with Barly meale, sodden in water, and sprinckled with a little Wine. Afterwardes, when they goe abroad, you must fele euerie one of them, whether there remaine any of the meate they receiued the day before: for if their croppes be not empty, it betokeneth want of digestion, and therfore you must kepe them fasting till all be digested. You must not suffer them to go farre from the Henne, but to kepe them about the coope, and to fed them till they ware strong with bruled Barly, and Barly Meale: you must also take good hede, that they be not breathed vpon by either Toade, Snake, or Euet, for the aire of such is so pestilent, as it by & by destroieth them al: which mischiefe is auoided by burning of Harts horne, *Galbanum*, or Womans haire, the smoke of al which preuēteth this pestilence. You must se beside that they lie warme: for they neither can suffer colde, nor too much heat, the feathers about their tailes must be pulled away, least with the hardning of their doung, their passages be stopped, which if it be, you must open softly with a little quil:

you

you must kæpe them with the Henne for a moneths space, and after suffer them to goe at libertie. Both the olde and the yong, are of all other diseases most troubled with the Pippe, specially about Harvest time, which is a little white skinne, couering the tippe of their tongue, which is to be plucked away with the Nailes, and the place to be powdred with Ashes, or Garlike powdred and sprinckled vppon it. From this plague you shall preserue them, by feeding them in cleane vesselles, and geuing them alwaies the purest and cleanest water, and kæping their houses alwaies cleane and smoked, or by smoking them as they sitte, with the smoke chæfely of Bayes and Sauin. The wiues of the countrey do commonly cure them, by thrusting a Feather through their nose, and stirring it euery day: their diet must be Hearbgrace wrapt in Butter or Garlike mingled with Meale or Water, or Cloues of Garlike wette in warme Sallet Oyle, and put into their mouthes. Some (saith *Columella*) doe vse to washe their mouthes with pisse, and kæpe their Billes so long close, as the salt and bitter taste force them to cast at their Nose the spring of the Disease. Others againe doe cut Garlike in gobbettes, and putting them in skalding Oyle, after it is colde, doe washe their Mouthes. If they happen to eate Lupines, they will straight swell vnder the eyes, which if you doe not gently open, and take out the Coze, it presently killeth them. And if so bee the Pippe haue nowe closed vp the eyes, and that they forsake their meate, you must lanch their Chækes with a sharpe knife, and thrust out the water that lieth vnder the eyes and put in the wound salte finely beaten: this happeneth chæfely when in the Sommer time they drinke foule water, and also when they want meat, or take colde. If their eyes be sore, you may heale them with the iuice of purcelane, and Womans milke, annointing on the outside, or with Cummin, Hony, and salt Armoniacke. You shall ridde them of Lise, with parched Cummin, and Staueſacre a like quantitie of eache beaten together, and powred on with Wine: also the water wherein wilde Lupines haue been sodden. If your Henne fall to eating of her egges, taking out the white, you must powre in Plaister, of some liquid thing, that may come to a hardnesse in the shell.

Against the pip.

To

To kéepe them from eating of Grapes, you ſhall giue them the berrie of the wood called the wilde Vine, gathered from the Hedge before it bée ripe, and ſodden with Wheate floure, the euill taſte wherof will cauſe them to loth Grapes. *Plinie* affirmeth that if you giue them the flowers of the Vine with their meate, they will not touch the Grape. As in all other cattell of the Countrey, ſo in theſe kindes the beſt are to be kepte, and the worſt either to bée ſolde, or to bée killed in the houſe. And therfore euery yéere about the fall of the leafe, when they ceaſe to bréede, you ſhall leſſen their number, and put away the olde ones. Such as are aboue thrée yéeres, and ſuch as are either vnfruitefull, or not good bringers vp of Chickins, but ſpecially thoſe that eate vp either their owne Egges or their fellowes, or ſuch as after the Cockiſhe maner either crowe, or treade: to which number you ſhall alſo adde, ſuch as were hatched after the tenth of June, which neuer prooue to bée faire, but the Cocke as long as he is able to treade you may kéepe: For you ſhall ſeldome méete with a good Cocke. For fatting, the beſte thoſe that haue the ſkinnes of their neckes thicke and fattiſhe. The place where you meane to fat them, muſt be very warm, and of little light, becauſe as both *Varro*, and our owne experience ſheweth, the light, and their often ſtirring, kéepeth them from being fatte: thus muſt they be kept for fiue and twentie daies, wherin they will bée fatte. Let them hang euery one in his Baſket or Cage by himſelfe, which muſt haue in it two holes, one to thruſt out his necke at, the other to caſt out his doung, that he may diſcharge himſelfe, and let them be ſtrawed either with ſtraw, or courſe hay: for the harder they lie, the ſooner they fatte. Pull awaye beſides their feathers from their heads, their wings, and their tailes, the one for auoiding of lice the other for binding their bodies. The meate that you giue them, muſt be Barley meale, which mingled with water, be made in little pellettes, wherewith they will bée fat (as ſome thinke) in fourtéene daies: but ſée that you giue it them but moderately at the firſt, til they well digeſt it, after giue it them in quantitie, according as they digeſt it: and in any wiſe giue them no newe, till you perceiue, by féeling of their croppes,

Choiſe of Poultry.

Fatting of Poultry.

that the olde bée endewed. Others doe sprinckle their meale with Honie sodden in Water, putting to three partes of water, one of Honie, and one of Wine, and wetting herein wheaten breade, they therewithall doe cramme them. Others saie, that if you put hereunto a little Milke, they will be wonderfull fatte. The Cockrels are gelded (as *Aristotle* saieth) in the hinder part, which when they tread, falleth out: this part, if you burne two or three times, they will be Capons. And if they be right Capons, their Coames becommeth pale, neither crowing, nor treading any more. Our wiues of the Countrey, cutting them betwixte the legges, take out their stones, & sowing vp the wounde, annoint it with butter, which done they shutte them vp in a Cope, not suffering them to drinke in a daie or two. From the beginning of Haruest, and all Winter long, the offall of the Corne, and the Barnes dore doth fede them sufficiently: where they plant vines, sparing others more costly fodes, they fede them with the kernelles of the Grapes: and where there is neither the offal of Corne, nor Grapes, they must bée fedde with Dates, Sperie, or such like. To cause them to laie in winter, you must giue them (as I tolde you) Hempseede. If you woulde haue great Egges, *Leoncus* teacheth to beate in pouder Bricke, or Flaunders Tile, and mingling it with Chesill and Wine, to make it in Dow, and giue it to your Henne, or to put a Saucerfull of the pouder of the Bricke, to a Gallon of Braune, and to fede them with it. The Egges of Pigions, Géese, Peacockes, and Turkeies, bée all white, the Egges of water Foules bée grœnishe, and pale, the Ginnie Hennes Egges, be like the Pehennes in all thinges, sauing that they be speckled as the Turkie Hennes. The Phesants, and the Kastrils Egges, are reddishe. The Egges of all Foules (as *Plinie* saith) are of two colours, wherein the Water foules Egges, hauing a great deale more yolke then white, and that more blacke than others. The Egges of Fishes, are al of one colour, hauing no white in them. The Egges of Birdes are by reason of their heate, brittle: and Serpentes Egges, by reason of their coldnesse, tough: Fishes, by meanes of their moisture, softe in laiyng, the round parte of the Egge commeth

Making of capons

Of Egges

first

firſt out, the ſhell being ſoft, & preſently after hard: what ſoeuer they haue, the long are moſt commended, as witneſſeth the Poet. The Egge in faſhion framed long, and of them (as I ſaied before) is brought forth the Cocke Chicken, as of the rounde ones the Henne, though *Ariſtotle* be againſt it. Some Hennes doe lay very greate Egges, and thoſe moſt times with two yolkes, hauing the ſhell deuided as it were with a circle, which both *Ariſtotle* writeth, and our experience approueth. Some both lay double, and hatch double: ſome are ſo fruitfull, as they lay great numbers of ones, ſome euery day, ſome twiſe a day: ſome are ſo fruitfull, as they kill them ſelues with laying. In the middeſt of all Egges, there lieth as it were a drop of blode, which is ſuppoſed to be the harte of the Birde, which is the firſt in all the body framed: The body it ſelfe is wrought of the white. The ſuſtenace is the yolke, the hed while it is in the ſhell, is bigger then all the body, the eyes ſhutte vp more then the hed. While the chickin increaſeth, the white goeth to the midſt, and the yolke compaſſeth round about. The 20. day (as I ſaid before) if you ſtir the Egge, you ſhall heare the Chickin, from which time the feathers come forth, lying ſo, as the head reſteth vpon the right foote, and the right wing couereth the head. The adell Egges are thought to come of the vaine luſte and treading of the Hennes together: ſome ſuppoſe them to be bred of the winde, & therefore call them winde egges as *Ariſtotle* before *Plinie* hath written. Egges are preſerued in Winter, if you keepe them in Chaffe, ſtrawe, or Leuen, and in Sommer, if you couer them with Bran, or wheate. Some do couer them before in fine beaten ſalt for the ſpace of fiue houres, and after waſh them and ſo lay them in chaffe, ſtraw, or bran. Others againe couer them in Beanes, & ſome in beane floure. and ſome in heapes of Salte: but Salte, as it ſuffereth not the Egges to corrupte, ſo it greatly deminiſheth the ſubſtance of them. Your Henne houſes muſt bee made in that parte of your houſe, as lieth in the Winter towarde the riſing of the Sunne, and ioyning as neare as may be to ſome Kill, Ouen, or Chimney, or to the Kitchin, ſo as the ſmoke may come amongeſt thē: for ſmoke is very holeſome for this kinde of foule. And that

was (I think) the cause that the old people made choise in their quitrentes of smoke Hennes, as of the best, as it appeareth by olde Rentalles. Let the front of your Henne house stande alwaies towardes the East, and to that coast let the dore open. Let the inner roomes bee well furnished with Lofte and Lathers, and small windowes opening Eastward, at which your Poultry may flee out in the morning, and come into the roust at night. Loke that you make them close at night, and let the windows be wel letteised for feare of vermine. Let your nestes and lodginges, both for laiyng and brooding, be orderly cast, and against euery nestee and rousting place, place steppes and bordes to come vp by, making them as rough as may be, that the Hennes may take good holde when they flee vppe to them, and not by their ouer smoothnesse, bee forced to flutter and hurte their Egges. It shall not bee amisse, if you pargette the house both within and without with good Plaster, whereby neither Weesell, nor other hurtfull Vermine may enter in. Borded flore are not for foule to rouste vppon, which almost all kinde of birdes refuse, because of the hurt that they receiue by their doung, which if it cleaue to their feete, breedeth the Goute. And therefore to roust vpon, you must make them perches, which *Columella* would, should be made fowersquare: but it is better to haue them round, so that they be not too smoothe for them to take holde by. Let the Perches reach from one side of the wall to the other, so as they stand from the flore a foote in height, and two foote in distance one from the other: and thus haue you the fashion of your Henne house. The Court where they go, must be cleane from doung and durtinesse, not hauing water in it, sauing in one place, and that must be very faire and cleane: for if it be pudled, or durtie, it breedeth (as I saide before) the Pippe. To keepe their water cleane, you may haue faire earthen, or stone vessell, or Troughes of wood, couered in the toppe, in the which there must be seuerall holes so bigge, as the head of the foule may easely enter: for if you shuld not keepe them thus couered, the Poultry would in their drinking defile and poison it with their doung. Their meate must be giuen them betimes in the morning for straying abroad, and

a little before night, that they may come the timelier to their rest. Those that bée in the Cope, must (as *Columella* saieth) be fed thrise in the day: the others must be vsed to an acquainted voice, that they may come at the calling. The number must be well marked: for they some deceiue their kéeper. Beside, you must haue rounde about by the walles, good plentie of duste, wherein they may bathe and proyne themselues: For as the Swine delighteth to wallowe in durte, so doth this kinde to bathe and tumble in the duste. And this is (I thinke) almost all that is to be saide of Pullein.

MELLISSEVS. Yea, but wée must heare something also touching the other sortes of Foule, that are kept about the house, which peraduenture *CHENOBOSCVS* can instruct vs of.

CHENOBOSCVS. And if you will néedes haue me, I wilnot refuse to shew you somwhat also of my feathered cattel.

MELLISSEVS. I pray you do so.

CHENOBOSCVS. Amongst the Foule that wée kéepe about our houses in the Countrey, the seconde place of right is due to the Gose and the Ducke, which are of the number of those that they call *Amphibia*, because they liue as well vpon the lande, as the water. And because the kéeping of Géese requires no great labour, it is a thing not vnméete for the housbandman, for that (if he haue place commodious for it) it is done without any charges, and yéeldeth good aduantage both with their brode, and feathers, for beside the profite of their Egges, you may twise in the yéere, at the Spring, and the fall of the leafe pull them. Moreouer, they are a very good dishe for the table, yea, being more watchfull then the Dogs, they giue warning when they slépe. And therefore they were with the Romanes had in great honour, because they with their gagglyng bewraied the enimy, that otherwise in the night time had take the towne: *Plinie* writeth of a Gose, that would neuer be from the Philosopher *Lacydes*. Your choise must be of those that bée of the faireſt kinde: *Varro* liketh best the white ones, which colour was most estéemed in the old time, as appeareth by the presents that were giuen: the same *Varro* accounteth the graie Of Geese

for a wilde kinde. They are kept in Marshes, Fennes, Lakes, and Moorishe commons: for to Corne ground, Medowes, and Pastures, it is a verie hurtfull Foule: she biteth whatsoeuer yong spring she may reach, and what she once hath bitten, doth neuer lightly prosper againe. Besides, she stencheth the ground with her vnprofitable, or rather most hurtful dounging: wherefore (as I saide) it is best to keepe them in Fennes, Lakes, and Marshes. If you haue store of such ground, you shall do well to keepe them: for you can not well keepe them without good store of water and pasture. The Goose delighteth in such meate as is naturally moist and colde, and shunneth naturally such thinges as are hurtfull for her, as the leafe of the Bay, and (as *Alianus* writeth) the *Oleander*: the best and meetest time for them to breede in, is from the Kalends of March, to the tenth of June. They tread most commonly in the water, while they swimme in the Riuers, or Fishponds. *Columella* would haue you keepe for euery Gander, three Geese, thinking by reason of their vnweldinesse, this number to suffice: within your courte, you must make them for their better safetie, seuerall, and secret pennes, in sundry partes thereof, where they may sitte and breede. Some would haue the Goose rome framed in such order, as euery Goose may haue her place to her selfe: which, if any man thinke too troublesome, he may make one sufficient wide rome to serue them all. The places where they shall lay, must be dry, and well strawed with strawe, or such soft matter, and well defended from vermine. The Goose must not be suffered to lay out of her nest, but when you shall perceaue they seek it, you must grope them, and if they be with Egge, which you shall easely feele, but shutte them vp in their nestes, which you shall not neede to do aboue once, or twise: for where shee hath once laide she will alwaies of her selfe seeke to be. They will lay (as some hold opinion) thrise in the yeere, if they be not suffered to sitte, as it is best you do not: for their Egges are better to be hatched vnder a Hen ne, then of them selues, and will better a great deale prosper. The Egges of Geese, and Swans, were vsed (as *Alianus* witnesseth) as a most daintie dishe at banketres, among the Kinges and Princes of the Indies.

Aristotle

Aristotle affirmeth, that the Goose alwaies vseth to sitte, and neuer the Gander, contrary to the order of many other foules, continuing alwaies till she haue hatched. After the last laying, you shall suffer them to sit, and marke euery ones Egges with a seuerall marke, that they may be set vnder their owne Goose, for it is thought they will neuer hatche a strangers Egges, without she haue her own vnder her. Of Goose Egges, as of Pehennes Egges, you shall (as I saide before) neuer set vnder a Henne aboue fiue, nor vnder three: but vnder the Goose you shall set at the least seuen, and at the most fiftéen. You must kéepe to laye vnder your Egges, the rootes of Nettles, which they saye, preserueth them agaynst the stinging of Nettels, which otherwise many times killeth the Gosling, if they sting them. The Egges will not be hatched if the weather bée colde, before the thirtieth daye, if it bée warme in lesser time: howbeit for the most part, the Gosling is hatched the thirtieth day after the sitting. Some doe vse to set by the nestes, Barly steéped in water or Malte, whereby the Goose shall not bée forced to be any while absent from her Egges. When your Goslings are come forth, you shall for the first tenne daies fede them with the Goose in the nest. Afterwards, when the weather is faire, you may suffer them to go abroade, taking good héede that they bée not stinged with Nettels, nor that you let them goe a hungerd into the Pastures: but to giue them afore they go abroad the leaues of Endiue, or Lettuse chopt, to asswage their hunger: for if you put them a hungerd into the fielde, they straine and breake their owne neckes, with pulling at the tough and stubburne weedes, by reason of the sudden starting back againe of the weede. The Goslings of diuers broodes must not go together, nor be shutte vppe together, for hurting one another. When they be foure moneths olde, or somewhat before, is the best time for fatting them: the yong ones are soonest, and easeliest fatted. If you giue them ground Malt, and wheate floure, you néede to giue them nothing, so you let them haue drinke enough, and kéepe them from going abroade. The Grékes did vse to put to two partes of ground Malt, foure partes of Bran, tempring it with water, letting them drinke thrise a day, & at Fatting of Geese.

Midnight. If you would haue their liuers ſoft and tender, you ſhall mingle dry Figges well beaten with water, and making pellets thereof, cram them with it for the ſpace of ſeuentéene, or twentie daies. The Iewes at this day, being the ſkilfulleſt féeders that be, doe vſe a ſtraunge order in the fatting of them, wrapping the Gooſe in a Linnen apron, they hang her vp in a darke place, ſtopping her eares with Peaſon, or ſome other thing, that by neither hearing, nor ſéeing of any thing, ſhée be not forced to ſtroggell, nor crie: after, they geue her pellets of ground Malt, or Barly ſteeped in Water thriſe a day, ſetting by them Water and Grauell, by which maner of féeding, they make them ſo fatte, as the Liuer many times commeth to bée fiue pounde in weight. Whyleſt I was at the Councell of *Wormes*, there was a Liuer of a Gooſe brought mée by a Iewe, that waied foure pounde. *Plinie* is alſo a witneſſe, of the greatneſſe of the Lyuers of fatte Géeſe, affirming, that they will growe after they bée out of the bodies, béeing ſprinckled with milke. The common order of fatting with our country people, is to ſhut them vp in a darke, and a narrowe place, and to ſet before them Barly, or Béech wheate, giuing them water, with a little Sand, or Grauell in their Troughes: and with this order they haue them fatte in fourtéene daies. After haruell, they will be fatte with the Grotten, or Stubble. They are plucked (as I ſaid before) twiſe in the yéere, in the ſpring, and in the fall of the leafe. Some vſe to clippe them, but then their feathers neuer growe ſo well: but if you pull them, you ſhall haue them to come verie faire againe: and this is enough for a Gooſe.

Duckes. Duckes and Teales, are to bée ordered in like manner almoſt as the Gooſe, ſauing that they delight more in Waters, and Marſhes: and therefore you muſt force ſome Waters, Lakes, or Poles, for them, whereunto they may eaſely goe and ſwimme, and diue at their pleaſure. *Columella* would haue you haue a Court for the nonce for them, where no cattell vſe, and neare to the houſe, rounde about the which you ſhal build for them little handſome romes, thrée foote ſquare, with pretie dores to euery one of them: which when they bréede, you ſhall kéepe ſhutte. Hard by, you muſt haue either ſome

Pond,

Pond, or Riuer wherein (as I said) they may swim: for without the helpe of the water they can as euill liue, as without the land. It is good also to haue neare vnto them, some good Pasture, or meddowe, or to set about the Ponds or Riuers, such hearbes as they best like, as Clauer, Fenegréke, Endiue, Lettise, and such other as they most delight in, and wherwith their yong doe well fæde: beside, you must giue them Otes, Barly, and other corne in Water. There is nothing that they more loue then Acornes, nor that better fatteth them. They delight wonderfully to be amongst Rædes and Sedges, wherein they may lie safe from rauenous Birdes, but so, as there grow no great stalked weedes, that may hinder their swimming: for they delight greatly to plaie them selues in the water, and to striue who can swim fastest, when the weather is faire and warme: for as they loue such places where they may best pray vpõ the creatures of the water, so are they much offended, if they be restrained of their libertie in swimming. In Winter, when the waters be frozen, you must ply them somtimes with meat. They delight to make their nestes in some secrete Couert, but therein you must preuent them, and make their Nestes in their owne lodging, or abroad, well couered and closed with weedes: to which nest you must haue some litle sluce, or gutter, by which you may euery day powre in Water and Meate. Their foode must be (as I saide) Otes, Barly, Pease, Panicle, Millet, and Spery, if you haue any store. They lay great store of Egges, wherewith as with Gose Egges, you may well fæde your familie. The Egges of Dugges and Géese, are kept in like sort as I told you of Hennes Egges: and beside in Bran, Wheate or Ashes. They brædde in the same season that Géese and other Foule doe, about March and Aprill. And therefore where you kepe them, you must strawe stickes and strawes for them to make their nestes withall. Their Egges must be suffered to be hatched by them selues, or els remoued & set vnder some henne: for the Ducklinges that the Henne hatcheth, are thought to bee gentler and tamer. You must take goode hæde, that the Egges which they lay, bee not eaten and spoyled by Crowes and Pies, while the damme is séeking abroad for meate. If so bee

you

you haue Riuers, and Lakes for the purpose. It is best to let the dammes bring them vp, for when they be hatched, they wil liue very wel vpon the water with their Dammes, without any charge at all: onely taking good heede, that they be defended from Buzardes, Kites, Crowes, and other like vermine: but so you vse them, as they wil euery night come home to the house, for it is not good to let them be abroade in the night, for danger of losing of them, and making them wild. Yet hath it been seen, that such as haue hatched abroade, haue afterwardes come home, and brought with them a great number at their tailes. When I was Embassador in England, it was told me by men of good credite, that there was in Scotland neere to the Sea, certaine Trees, that yeerely brought forth a fruite, that falling into the Sea, became a kinde of wilde Duckes, or rather Barnacles, which though it seemed strange vnto me, yet found I *Aristotle* a witnesse of the like, who writeth, that the Riuer *Hypanus* in *Scythia*, bringeth forth trees, whose leaues being somewhat larger then Maple leaues, whereof commeth a kind of foure foted Birdes. But nowe to Peacockes, which Birdes being more for pleasure then profite, are meeter to be kept of noble men, then of poore Husbandes of the Countrey, though *Varro* writeth, that *M. Anfidius Lurco*, who first beganne the fatting of this Foule, made yeerely of his Peacocks foure hundred pounde, whose example numbers following, the price of Peacocks grewe to bee great, so much, as their Egges were solde for halfe a crowne a peece, the Peacockes themselues, at foure Nobles a peece. The flesh is verie good and delicate, meete for noble mens Tables, and will be long kept without corrupting, the Egges also bee very pleasant, and good to bee eaten. *Hortensius* they saie, was the first that euer killed Peacocke for the Table in Rome, as a newe dishe at the Priestes feast. To this Bird, is ascribed both vnderstanding and glorie: for being praised, hee settes vp straight his taile, and (as *Plinie* eloquently describes it) cheefely against the Sunne, whereby the beautie may more bee seene. His taile falling euerie yeere with the fall of the leafe, hee mourneth, and creepeth in corners till his taile bee sprong againe. They go abroad, as

Peacocks

Hennes

Hennes and Chickins doe without a keeper, and get their owne liuinges. They be best kept in little Ilandes: for they flee neither hie, nor farre off. Some thinke it to bee a spitefull and an enuious Birde, as the Goose to be shamefast, and that hee deuoureth his owne doung, because he would haue no man receiue benefite by him. Hee liueth (as *Aristotle* saith) fiue and twentie yeeres: hee breedeth at three yeeres olde, the Cocke hauing his feathers diuers coloured: hee hatcheth in thirtie daies, as the Goose doth, and laieth three times a yeere, if his Egges be taken away and set vnder a Henne. You must loke, that those that you set vnder a Henne, be newe laid, and that the Henne from the first of the Moone, bee set vppon niene Egges, fiue of the Peacocks, and foure of her owne. The tenth day after she hath sitte, take away the Hennes Egges, and put vnder the like number of freshe Hennes Egges. They must be turned, and therefore marked vppon one side. And see that you chose the greatest Hennes, for if the Henne be little, you must take the lesser number of Egges, as three Pehennes Egges, and fiue Henne Egges. When they bee hatched, you must as you do with the Henne, let them alone: the first day afterwards bring them out, and put them with the damme into a Pen, and feede them at the first with Barly flowre sprinckled with water, or pappe made of any other Corne, and coled. A fewe daies after, giue them beside this, chopped Lekes, and Curdes, or freshe Cheese, the Whay well wrong out: for whay is thought to be very hurtfull for the chickins. After they be a moneth old, you may let them goe into the feeld and followe the Henne, tying the Henne with a long line, that she go not to far abroad, but that the Chickin may come home in time. After the sixth moneth, you may giue them Barly, and bread: and after the seuenth moneth, you may put them to roust in the house with the other Peacockes, not suffering them to sit vpon the ground, but vppon Perches for taking of colde. And although when they ware greate, they cheefely delight to sitte vppon the toppes of Houses, and bee as the Goose is, which are the best watchmen, and also the best warning geuers in the night time: yet is it best for you to vse them to sitte vppon Perches, in Houses

ses made purposely for them. *Columella* thinkes it not good to suffer sundrye Hennes with their Chickins to fæde together, because the Henne after she seeth a bigger then her owne, maketh the lesse account of her owne Chickins, and many times by that occasion forsaketh them. The Cocke, for the great lust that he hath to treade, breakes asunder the Egges that bee vnder the Henne, and therefore it is best to haue the Hennes to sit as secretly as may bee: they also vse to beate and chase their owne Chickins, till they see them cressed vppon the head, taking them till then, to bee none of their owne. One Cocke sufficeth for fiue Hennes, who by too oft treading, doth manie times cause that the Egges neuer come to good. In warme countries they beginne to treade in Februarie, when setting vp his taile round about him, taking himselfe for no small person, hee beginneth to woe, and therefore at this time both the Cocke and the Henne, are to be cherished with meates for the purpose to encrease their lust, as Beanes tosted a little by the fire, and giuen them warme euerie fiue daies in the morning. The quarellous and troublesome Cocks, must be seuered from their fellowes, for hurting the weaker, and keeping others frō treading. The Hennes must be kept so, as they may laye onely in their houses, and euery day groped for their egges, & heedely loked to, with softe strawe laide vnder their Perches: for many times they lay as they sit vppon the Perch. The diseases of this Foule, and the remedies, are almost one with the diseases of the house Cocke and the Hen spoken of before, that is the Pippe, and ill digestion. Their greatest danger is, when their Combes come first out, for then are they pained, as children are in breeding of teeth.

Diseases.

Turkie Cockes.

MELLISSEVS. I would faine learne the right ordring of their outlandish Birds, called Ginny Cocks, & Turky Cockes.

CHENOBOSCVS. This kind of Poultry we haue not long had amongst vs: for before the yeere of our Lorde. 1530. they were not seene with vs, nor I beleeue knowne to the olde writers. Some haue supposed them to be a kinde of the Birdes called in the olde times *Meleagrides*, because of their bleuish coames: but these kindes haue no coames, but onely wattles.

Others

Others againe reckon them for a kind of Peacockes, because they doe in treading time after the same sort, spread and set vp their tailes, bragging and vanting them selues: howbeit they neither resemble these in all pointes. But because this kind of Foule, both for their rarenesse, and also the greatnesse of their body, is at this daie kept in great flockes, it shall not be much amisse to speake of thē: for in daintinesse and goodnesse of meat, the Hennes may compare with either the goose, or the Pehen, and the Cocke farre excell them. The colour of their feathers, is for the most parte white, blacke, or pied white and blacke, some blewe and blacke. Their feete are like vnto the Peacocks, their tailes short, but spread, and borne vp after the Peacockes guise, specially when they tread. The heads and the necks of them, are naked without feathers, couered with a wrinckled skinne, in maner of a Cowle, or a Hoode, which hanging ouer their billes, they draw vppe, or let fall at their pleasures. The Cocke hath the greater wattels vnder his chinne, and on his breast a tufte of haire. The colour of that wrinckled skinne about his heade (which hangeth ouer his bil, and about his neck, all swelling as it were with little blathers) hee changeth from time to time like the *Chamælion*, to al colours of the Rainebow, sometimes white, sometimes redde, sometimes blewe, sometimes yellowe, which colours euer altering, the bird appeareth as it were a myracle of Nature. The dieting and keeping of them, is almost al one with the Peacocke, sauing that this bird can worse away with colde, and wet. It is a birde wonderfully giuen to breeding, euery Cocke must as the Peacocke, haue foure or fiue Hennes with him: they are more forward in breeding then the Peacocke, beginning either the first yeere, or at the farthest at two yeere olde: they begin to lay in March, or soner. In hotte countries they lay greate numbers of Egges, if they be continually taken from them, and set vnder henns, and if so be you take them not away, they begin to sit at the first: for they be of all others most giuen to sitting, and so much, that if you take away all their Egges, they will sitte vpon a stone, or many times the bare nest. You must therefore restraine them of this desire, either by thrusting a fether through their nose (as

I before told you) or by wetting their bellies with cold water. You must sette vnder their Egges (as I taught you before) in the Peacock: for they haue both one time of hatching. The keper must marke the one side of the Egges, and alwaies tourne them, sprinckling them now and then gently with faire water, and take hede the Cocke come not at them, for he will breake them as well as the Peacocke: for the Cocke of this kinde, is a frowarde and mischieuous Birde. The Chickins being hatched vnder a Henne, may be kept with the Hennes Chickins, or els verie well alone with the Henne, growing faster a great deale then the Peachicke. You shall fede them in like sort as you doe the Peacocke, or other Poultry: for they wil eate any thing, and delight in Gralle, Wedes, Graueil, and Sande. And because they cannot away with colde, nor wette, you must kepe them in Winter, in the warmest and driest places you haue. The Pearches whereon they vse to sit, must not bee hie, but an eight or tenne foot from the ground, neither be they able to flee any great height, and therefore must bee holpen with Lathers, or steppes. The greatest disease, that they are subiect vnto, as the Pippe and the Squecke, which must be holpen in like sorte as the Hennes, and the Egges kept after the same maner. In some places they vse to make Capons of them when they be yong, which are serued as a daintie dishe to the table, as was much vsed in the house of that godlie and vertuous *Sempronia*, that Ladie Hales of Kent, who was first the wife of sir Water Hauntill of Northamptonshire, a woman in whom all vertues and bounties in her life time florished.

Ladie Hales a mirror of Gentlewomen.

MELLISSEVS. I well remember that ladie, and haue heard her highly commended of such as in her life time best knewe her, for a number of gratious and godlie giftes that were in her, as her speciall loue and delight in God, and in his seruice, her helpfull hande and comforte to such as were poore and distressed, as well in releeuing them with meat and mony, as with healing diseases, and curing a number of lothsome, and almost incurable vlcers and wounds, her milde and sweete disposition, her great humilitie, and carelesnesse of the vaine worlde, and other such vertues, I woulde to Christ that all o-

ther

ther Gentlewomen, that profesſe Chriſt outwardly, were as well giuen to follow him indeede, as ſhe was vnfainedly.

CHENOBOSCVS. She was the verie Phenix and Parageon of all the Gentlewomen that I euer knewe, neither am I ſure I ſhall euer ſée the like: but ſhe happely reſteth with him, whom in her life time ſhe ſo earneſtly ſerued. If you bée not wearie, I will returne to my Foule, and ſhew you the beſt order for keeping and maintaining of Pigions.

PVLLARIVS. I thinke both *MELLISSEVS.* and *PISCINARIVS* would gladly heare you tel vs ſomthing of this, as I my ſelfe moſt willingly alſo would.

CHENOBOSCVS. Though you *PVLLARIVS* are better able to ſpeake hereof then I am, yet becauſe of my profeſſion, I will not refuſe to take it vppon me. Whatſoeuer he bée, that giues himſelfe to the trade of Huſbandry, it behoueth ſpecially to haue a care for breeding of Pigions, as well for the great commoditie they yelde to the Kitchin, as to the profit and yéerely reuenue that they yéeld (if there be good ſtore of Corne fields) in the Market. *Varro* writeth, that in his time a paire of Pigions were ſolde for 1000. *HS.* And that *Lucius Axius*, a knight of Rome, before the ciuill warres betwirt *Cæſar* and *Pompei*, ſolde his Pigions at x.li. the paire: ſo much was that time giuen to wantonneſſe and gluttonie, yea at this day in our time, hath béene ſéene giuen for a paire of Pigions x.li. Flemiſh. And therefore the Douehouſes are commonly built with great coſt, and beautie in the toppes of turrets and houſes, from whence by narrowe grated windowes they flée abroad to their féeding. Pigions (if the countrey be for them) are fedde and maintained with little coſte, féeding themſelues all the yéere long with ſuch meate as they finde abroade, except at ſuch time as the ground is couered with ſnowe, when as you muſt of neceſſitie helpe them with a little meat. There is two ſortes of them, one wilde kinde, that is brought vp in Douehouſes, and is of colour, either bleuiſh, white, ſpeckled, or dun, howbeit, the white is not good to be kept, becauſe they be ſoneſt deſtroied with vermine. In Italie, there are of this ſort, as bigge againe as ours, and are now common in Flaunders. Pigions.

An

An other sort is more familiar and tame, and something more large of bodie, with rough fæte, and commonly of colour white and somtume speckled and yellowish: this kinde is commonly kept in cities and townes, where the others can not bæ kept, and is fedde with meate at home, and because they are euer in daunger of vermine, and rauening Birdes, they are still kept within doores, and alwaies fedde at home. This kinde the common people cal tame Pigions, or month Pigions, because they brædde euery moneth, saue in the dead of Winter. Both these sortes are wonderous fruitefull, brædding commonly eight times a yære (if the kinde bæ good) yea sometimes tenne, and aleuentimes: for in Egipt (as *Aristotle* telleth) they brædde all the winter long. And though Hennes are more fruitfull in laing of Egges, yet Pigions are more profitable by often bringing forth yong: and therefore you must prouide you such brædders, whose bodies be great and faire, not too olde, nor too yong, of a good and perfect colour, and a fruitefull kinde. It behoueth him that will begin a Douehouse, not to begin with the yong and little ones, but with the brædders, and to buy so many Cockes, as he doth Hennes, and to kæpe them if he can, matched together of one nest: for if they be so matched, they will brædde a great deale better. They bring forth commonly a Cocke and a Henne together (as *Aristotle* writeth) and our experience sheweth it: In March they begin to brædde, if the weather be warme before. There is no birde fruitefuller then the pigion, and in fortie daies she conceiueth, laieth, sitteth, and bringes vp, and that for the most part all the yære, except (as I laide before) in Winter. She laieth two Egges, and when she hath laied the first, which is a Cocke, the nert she layeth, which is a Henne, the thirde neuer lightly commeth to good. Both the kindes doe alwaies sitte, the Cocke in the day, the Henne in the night, they hatch in twentie daies, they lay after fiue treadinges. In Sommer they sometimes bring forth in two monethes thræ paire: For vppon the 19. day they hatch, and presently conceiue againe. And therfore you shal often find among the yong Pigions, Egges some ready to hatch, and some fliyng: if there be no Cockes, the Hennes will tread one

the

the other, but their Egges neuer come to good, but are winde Egges: *Aristotle*, and *Theodorus* calleth them water Egges, wherof there neuer commeth any thing, and because the yong ones will breede at fiue monethes olde, we suffer the first flight to flie, to increase the breede: as being hatched in March, will breede againe in July, or August. Those that we meane to take for the Kitchin, or the Market, are best to be drawen at the latter time of the yeere, when they are worst able to defende them selues from the colde, and from Buzardes, and Crowes: the best for brode among all Foules, is the Marche brode. They that meane to fatte Pigions to sell them the dearer, do seuer them when they be newly feathered, and fede them with chawed white Bread twise a day in Winter, and thrise in Sommer: and such as bee nowe harde pend, they leaue in the Nest, plucking the feathers of their wing, and breaking their Legges, that they remoue not from their places, geuing the damines good plentie of meate, that they may better fede them selues, and their young. Some (as *Gellius* writeth) do softly tie their Legges: for if they should breake them, they think the paine would keepe them from fatting: but this tying doth little good, for while they struggle to get them selues lose, the labour will keepe them from being fatte: but their Legges being broken, the paine will not remaine aboue two daies, or three at the vttermost, and will keepe them that they shall neuer stray from their places. Some vse onely to pinion them, but so fall they many times out, and become a pray to Vermine: and therefore it is good to bring them to the Kitchin, before they bee full ripe. The vnfruitfull and naughtie coloured, and the otherwise faultie, ought chefely to be fatted, and must be crammed in such sort as you cramme Capons. Douehouses, or places for pigions, to builde in, are made after diuers manners: for the tame Pigions, and such as are fed at home, they make in the highest partes of their Houses lying towarde the South, certaine hollowe romes, and celles for them, such as *PVLLARIVS* hath described for his Pullen: and if the place doe not so serue, driuing in certaine Pinnes into the Wall, they lay vpon them frames of boords, with particions in them, or earthen

pottes to brede in, letting certaine Ledges runne from hole to hole, that they may the better come to their Nestes, and walke vp and downe in the Sunne. But the houses for the other wilder kind, because they containe great numbers, are built after a more handsome order, although vnder the eues of houses, and in steeples of Churches, you shal haue thousands breeding. *Varro* appointes the Douehouse to be built in this sort: a Towrie adioyning to the house, & wel lofted and seeled, aboue, with one little dore in it, and foure windowes, answering the foure quarters of the Heauen, which windowes must be wel grated, so as they may geue light enough, and keepe out Vermine. All the walles within must be faire white lined, for with this color is the Pigion wonderfully delighted: besides it must be well pargetted and plaistred without, specially about the windowes, so as neither Mouse, Weesell, nor other Vermine may enter: the windowes must be so placed, as they may let in the Sun al the Winter, hauing a hole of sufficient wideneſſe ouer against them, well netted & tunnelled, in such sort as the Pigions may easely flee out and in at, & yet not suffer any hurtfull bird to enter: for the Pigion taketh great delight in flying now and then abroade, where after she hath recreated her selfe, she commeth with ioy to her nest againe: as on the otherside she mourneth, if she be restrained of her liberty. Round about the wales within you must haue little round holes, from the top to the bottome, wherein they may brede: *Varro* would haue them three handfulles in length, and ledged from hole to hole for them to walke vppon. Some thinke it best to make your Holes of Lome, or Lime, and not of Bricke and Stone, as many do, because of the warmth. There be some that build their Douehouses vpon pilers in the middest of some Pond, or great water, both because they delight in water, and because they will haue them safe frō vermine. The meat that they most delight in, is Tares, wilde Fytche, Pease, Wheate, Millet: where these be not, you may giue them Spery, specially in winter Rape seede, and Cocle: for by gathering and pecking vp these little seedes, they geat them selues a heate in cold weather. When you giue them meat, you must throwe it hard by the Walles: for that part is commonly cleanest

cleanest from doung. And though *Varro* biddes you to swéepe and make cleane your Douehouses continually, and that the doung is good and profitable for the fielde, yet seeing this kinde of foule doth delight in places sprinkled with their owne doung you shall not néede to be carefull in cleansing of it. Looke well that they be not fraide, or disquieted with Gunnes, or noise of people, or other like, specially when they sitte: and if you haue occasion to go into the house, see that you do it about noone time, when they be abroad a feeding, and beesure to knocke well before you come in. Some say, that it will cause them to loue the house, and allure others to come thither, if you sprinkle them with Commin, before they goe to feeding, or perfume the house with Sage, and Franckensence. Some haue an other experience for this purpose, and that is Potshardes beaten small and fearced, mingled with the hearbe Coast, and good old wine, and geuen vnto them. Others take Barly flowre, sodden with dry Figges, and a part of Hony. *Cardan* teacheth this, as the best for this purpose, of Barly, or Millet, of Commin, of Coast, of *Agnus Castus*, of Hony, of old Lome, or Morter, of good Muskadell, boile them all together, and make a stone of them to bée set in the middest of a house. *Tragus* teacheth to take the rootes of the Thistell, and to boile them with the pickle of Hearinges. *Constantine* out of *Didymus*, writeth of diuers other thinges for this purpose, which who so will, may trie. Looke well that they bée not destroied by the Hauke, or Buzard: the Hauke is a speciall enemie to this Birde, whose taking, *Varro* teacheth you in this maner: to lay a Pigion vppon the grounde, and to sticke, bending closely ouer her, a couple of Lime rods. There is a kinde of Hauke, that naturally is terrible to other Haukes, and preserueth the Pigion: the common people call it Castrell. *Columella* affirmeth, that if you take the young Castrels, and preserue them euery one in earthen vesselles well couered and plastered all ouer, and hang them in the corners of the Douehouse, it makes the Pigions haue such a loue to the house, as they will neuer forsake it. They haue many other aduersaries, Crowes, Dawes, and Owles, which all destroy the Pigions, specially when they bréede. I founde of late in myne owne

Douehouſe, an Owle ſitting ſolemnly in the Neſt vppon her Egges in the middeſt of all the Pigions, and hard by the houſe in an olde hollowe tree, I found peeces of young Pigions, that the Owles had brought to feede their young with: and though the Owle ſeeme to bee greater then the Pigion, by reaſon of the thickneſſe of her feathers, yet will they creepe in at as little a place as the Pigion will: ſo ſmall and little is their bodies, though they be bombaſed with Feathers. Againſt Weeſels, Stoates, and ſuch like, *Palladius* would haue you hedge the Douehouſe about with ſharpe prickly branches void of leaues, as Goꝛſe Bꝛyers, and ſuch like, as they dare not paſſe thꝛough foꝛ pꝛicking. *Didymus* and others, doe bidde you hang greate bꝛanches of Rue all about the houſe, ſpecially at the entrance of the doꝛe, oꝛ to put wilde Rue vnder their winges, oꝛ to ſpꝛinckle them with Rue: foꝛ this hearbe (as they ſay) hath a ſpeciall foꝛce againſt ſuch hurtfull vermine. Some ſay, that if a woolues head bee hanged in the Douehouſe, it will dꝛiue away all hurtfull vermine.

MELLISSEVS. We haue heard enough of Pigions, I pꝛay you pꝛoceede with ſuch other Birdes as you keepe in the countrey. Keepe you any Feſantes here?

Pheſantes.

CHENOBOSCVS. This kinde of Birdes (though they bee very ſeldome kept among the countrey people) yet of many curious and fine fellowes, foꝛ their rareneſſe and daintineſſe, they are bꝛought vp, and kept. And becauſe they benefite the keeper, and pꝛofite the Huſband, (if the ſoile and countrey be foꝛ them) the olde wꝛiters haue placed the keeping of them, within the compaſſe of huſbandꝛie. *Palladius* teacheth, that you muſt pꝛouide ſuch as be young and luſtie, that were of the laſt yeeres bꝛinging foꝛth: foꝛ the olde ones be neuer fruitefull. One Cocke is ſufficient foꝛ two Hennes: they bꝛeede once a yeere, and lay to the number of twentie Egges, beginning in Apꝛill, and ſomewhere in March, but they are better to bee bꝛought vp vnder a Henne: ſo as you ſet vnder one Henne fifteene Egges, obſeruing the time of the Moone, and the number of the daies, as I tolde you befoꝛe of the Henne. The thirtieth day they come foꝛth: foꝛ the firſte fiftene dayes muſt

feede

fæde them with Barly floure tenderly sodde, and cooled, vppon which you must sprinckle a little Wine. After you shall giue them Wheate, Grashoppers, and Antes Egges: let them not come neare the Water for catching the Pippe, which if they chance to haue, you shall rubbe theyr bils with Garlicke stamped together with Tarre. They are fatted in thirty daies with Wheate floure, or Barly floure made in Pellettes, the Pellets must be sprinckled a little with oyle, & so put into their throats, you must take hæde you put it not vnder their tongs, for if you do, you kill them: neither must you giue them any meate till you perceiue the first be digested.

PVLLARIVS. What say you to Turtle Doues, these are also brought vp and kept in some countries. Turtles.

CHENOBOSCVS. *Columella* affirmeth that Turtles will neuer laye, nor bring forth in the house, nor Partridges: and therefore they vsed to take them wilde when they were full ripe, and to fæde and fatte them in little darke roomes like Pigions holes: the olde ones be not so good, as neither the Pigion is. In Winter you shall hardly haue them fatte, in Sommer they will fatte of themselues, so they may haue plentie of Wheate and Corne: the water must bee verie cleare and freshe that you giue them. They holde opinion, that the Turtle after hee hath lost his mate, continueth euer after solitarie. But because there is greater store of Thrushes & Blackbirds. we care the lesse for keeping of Turtles. Though Thrushes & Blackbirdes be kept in diuers places: yet as *Plinie* saith, there is in no place greater company, then is taken in the Winter time in Germanie: that they were vsed for great dainties, appeare by *Horace.* Thrushes & Blackbirdes.

No daintier dish then is the Trush,
Nor sweeter then the Trype.

They are commonly dressed whole and not drawne, for their inward partes may well be eaten, so they be new: their Crops are commonly full of Juniper Berries, *M. Varro* wryteth, that Thrushes were in his time at twelue Pence a peece.

Where they vse to keepe them, they also put as manie as they take wilde among the others, that they brought vp before, by whose companie and fellowshippe, they passe away the sorrow of their prisonment, and fall to their feeding: for you must alwaies haue olde fellowes for the purpose, by whose example they may learne both to eate & drink. They must haue warme houses, as your Pigions haue, crossed through with small Pearches: for after they haue flowen about, or haue fedde, they desire to rest. The Pearches must be no higher then a mans height, so as you may easely reach them standing vppon your feete. The meate must bee cast in such places of the house, as lie not vnder the Pearches, for filing of it. *Columella*, and *Palladius* write, that vnripe Figges beaten and mingled with Wheate flowre must be giuen them, that they may eate therof their filles. *Aristotle* maketh manye kindes of them, among which he also putteth the *Colmons*, that feedeth vppon Grapes. Our Thrushes doe feede for the most part vppon Juniper berries, which their Crops being opened (as I saide) doe shewe. They vse also in many places to keepe Quailes, which is rather a Birde of the earth, then of the aire, (as *Plinie* saith) but because they feede vpon Elebor, and venemous seedes, and beside are vered with the falling sickneſſe, many doe marvaile (as *Athenæus* writeth) why they bee so greatly esteemed. They say, their yong must bee fedde with Ants, and Emets Egges, as the Partrige. It is thought, that hee flieth ouer into other Countries in the Winter time, as the Crane, and the Storke doth, following for their guide the oldest Quaile, called the mother Quaile.

Quayles.

PVLLARIVS. You haue forgotten one noble and goodly foule, that is vsed to be brought vp in the husbandmans ponds, Lakes, and Riuers, I meane the Swanne.

CHENOBOSCVS. You saye trewe: for this Byrde is commonly brought vp in the lowe countries, and kept in great numbers in Linconshire, a Country replenished with Gentlemen of good houses, and good house keepers. And *Athenæus* alledging the auctoritie of *Aristotle*, accounteth this Foule to bee verie fruitefull, and of great stomacke, so much, as it is

The swan

thought

thought they dare geue battaile to the Egle. They are bredde and kept (as you well saie) in Lakes, Riuers, and Fishponds, without any charge at all, and doe greate good in the Riuers by plucking vp the weedes, and other annoyances: for the excellencie of his downe, and daintinesse of his flesh, hee is greatlie esteemed. There is one excellent kind of them, that taketh his name of the good watche that hee keepeth, and is alwaies cherished and kept in the Ditches of Cities, and Fortresses, for his greate faithfulnesse in geuing warning. They bee kept almost in like manner as Geese are, but that they vse to sitte longer, sitting a whole moneth, or there aboutes: they bring forth seeldome aboue eight, and so manie did my Swannes bring mee, and sometime fiue. They make their Nestes hard by the water of Sedges, Weedes, and like stuffe: their young ones they carry streight into the Riuers. If the Lakes and streames be frozen in Winter, you must house them. This Bird is counted among such as liue longest, foreshewing her owne death, as *Plato* and *Martiall* witnesse, with a sweete and lamentable song. Thus much concerning my profession I haue tolde, I trust you that bee my frendes, will take it in good part, and now *PISCINARIVS* I resigne my place to you, to whose turne it is come.

PISCINARIVS. It falleth out in good order, that from talking of Water Foules wee should come to entreat of Fisheponds, and Fish: although I dow meane to entreat largelyer both of keeping and taking of Fishes in my *Halientycks*, but because the husbandes house, both for watering of Cattell, and other vses, can not be without Ponds, and Lakes, and that euery house is not so seated, as it hath errable ground about it, it is lawfull for the Husband to make his best aduantage of his Ponds, and Waters. The Noble menne and Gentlemen of Rome, were wont to builde about their Houses faire Fishe Ponds, and many times satisfied herein their pleasure, with exceeding cost and expences, as *M. Varro* writeth, of the sumptuous and costly Fisheponds of *Hortensius*, *Hircius*, and *Lucullus*. *M. Cato*, when he had the wardship of *Lucullus*, made foure hundred pound of the Fishe in his Pond. The same Of Fishe-ponds.

Varro maketh mencion of two sortes of Fishpondes, the one of swéete water, the other salt, the one amongst the common people, where the springes fede them, and of greate profite, the other neare to the Sea, where *Neptune* doth yelde them both store of water and Fishe: for examples, may serue the Fishpondes of *Hortensius* which rather pleased the eye, then the Purse. The best making of Pondes, is either by the Sea, as *Lucullus*, who to let in the Sea into his Pondes, made a passage through the middest of a greate hill, whereby he thought him selfe as greate a Lorde of Fishe, as *Neptune* him selfe: or els to haue them fede from some greate streame or Riuer, that may bring in both water and Fish, which by Fludde or Sluse, may let in alwaies fresh water, not suffering the olde to corrupt, but alway refeshing it, and bringing more Fishe. The nert in goodnesse, are those that are fedde with pipes or secrete passages vnder the ground, and may be let out againe by sluse, which Sluses must so be made, as when you list, you may let the water into your Meddowes, to make them more fruitfull, as is to bée séene in the Countries of the *Swytches*, and *Heluetians*, and in many other places. And therefore the waters (as I said) must be well enclosed with good Bayes, Bankes, and walles, that they may be able to abide the rage of the fluds and the water. The worst & last kind, is such as are made in lakes, standing Poles, and Raine waters. These kinde of Pondes, though they bée the worst, by reason of their vncleane stinking and corrupt water, yet where there is no better, are to be made account of: for though they be not the holesomest for képing of Fishe, yet they yelde some commoditie, and are most necessary about the house, either for watering of Cattell, képing of Géese and Duckes, and washing, and other like vses: but if so bée you can make them either by the Sea, or neare some greate Riuer, so as the Water may bée let in and out at your pleasure: and whensoeuer you open the Sluses to let out the water. Be sure that you haue them well grated, that the Fish can by no meanes passe through, and let the passages, if the place will suffer it, be made on euery side the Pond: for the olde Water will best voide, whensoeuer the streame bendes, the

currant

currant lie against it. These Sluses or Passages, you must make at the bottome of the Pondes, if the place will so serue, that laying your leuell with the bottome of the Pond, you may discerne the Sea, or Riuer, to lie seuen foote higher: for this *Columella* thinkes, will be a sufficient leuel for your Pond, and water enough for your Fish. Howbeit, there is no doubt, the deeper the water comes from the Sea, the coler it is, wherin the Fishes most delight. And if so bee the place where you meane to make your Pond lie leuell with the brim of the Sea, or the Riuer, you must digge it nine foote deepe, and lay your Currant within two foote of the toppe, and so order it as the water come in aboundantly: for the old Water lying vnder the leuell of the Sea, will not out againe, except a greater rage come in: but for the Pond that is subiect to the fludde and the ebbe, it is enough if it bee but two foote deepe. In the bankes and sides of these Ponds, you must haue Bushes and Creeke holes, for the Fish to hide them in from the heate of the Sunne: besides, olde hollowe trees, and rootes of trees, are pleasant and delightfull harbours for Fish. And if you can handsomely conuay them, it is best to bring from the Sea, little Rockes with the Weedes and all vppon them, and to place them in the middest of youre Ponds, and to make a young Sea of them, that the Fishe may scarsly knowe of theyr imprisonment. About Turwan in Fraunce, and in other places, you shall finde in Loughes and Rayne Waters, euen, in the wildernes and Heathes, great abundance of Fishe. In diuers places of the lowe Countreys, where they haue their Ponds fed with the Riuer, which they may shutte out at their pleasure, they so order them, as they be either enuironed, or deuided with deeper Ditches, wherein the Fishe doth liue in the Sommer time: and the rest of the ground betwixt the Ditches, the water being voided and kept out by Sluses and Bankes, is sowed with Sommer Corne, and after Harueste, the water let in againe, whereby the ground beeing wonderously enriched, doth yelde greate Croppes of Barlie, and Sommer corne, and (as the Poet saith) for the land, so may be said for the water, *Not euery ground for euery seede*, but regarde must bee had, what for euery one meete. The Romanes

keepe

kéepe in their Ponds Lampreyes, Dyllers, Luces, Mullettes, Lampoins, Guyltheddes, and all other Fishe besides, that are vsed to be kept in freshe waters. Ponds for Dysters, were first deuised by *Sergius Orata*, at the Baynes, about the time of *L. Crassus* the Orator, before the Battaile of *Marsie*, not so much for delicasie, but for his commoditie and gaine. Cocles, and Musles, were kept in Ponds by *Fuluius Hirpenus*. Moreouer, diuers Fishes delight in diuers places. The best Pikes and Luces, were thought to be in the Riuer of *Tyber*, betwixt the two bridges: the Turbotes, at *Rauenna*: the Lampreyes in *Sicyll*: so Riuers, Lakes, Poles, and Seas, in some places haue better Fishe, then in others. Whereto to returne to my Fishponds from whence I came, neither may all sortes of Fishes bée kept in euery one, for some sortes are Grauellers, delighting onely in Grauellie, Stonie, and Sandie Waters, as Menowes, Gudgins, Bulheades, Ruffes, Trowtes, Perches, Lampoins, Creuishes, Barbils, and Cheuins. Others delight againe in Muddie places, séeking euer to lie hid in the Mudde, as the Tench, the Ele, the Breame, the Carpe, and such others. Some againe delight in both, as the Pike, the Lure, the Carpe, the Breame, the Bleake, and the Roach. The Grauelly Fishes, specially the Menowes, are ingendred of Shéepes doung, layed in small Baskettes in the bottome of a Grauellie Riuer. The Luce, or Pike, groweth (as likewise doth the Carpe) to bée great in a short time, as in thrée or foure yéeres, and therefore in such Ponds as haue neither the Sea, nor Riuer comming to them, wée vse euerie fourth, or third yéere, to drawe the olde, and to store them with yong. And in these parts we chéefely store them with Carpe, hauing small Ponds, and Stewes for the purpose to kéepe them in, so as you may come by them at your pleasure. Thus much I thought good to declare vnto you touching my profession, let vs now sée what you (*MELLISSEVS*) can saye for your Bées, and your Hony.

Bees.

MELLISSEVS. Because I will not haue our discourse of husbandry depriued and maymed of such a profitable member, whose vse may in all places, be they neuer so desert, or barren,

ren bee had, I thinke it good as a conclusion to the whole, to shewe you for my part, the manner of keeping and ordering of Bees: for the good husband by cherishing of them, picketh out many times a good peece of his liuing, yea the poore soule of the Countrey that hath no ground to occupie, may raise hereof and that without charges a great commoditie. *Merula* reports, that *Varro* had yeerely for the Rent of his Bees, a thousand gallons of Hony: and that in a house in Spaine, hauing not passing one Aker of ground to it, hath yeerely beene made of the Bees, foure score poundes worth of Ware and Honie. This little poore creature the Bee, doth not onely with her labour yelde vnto vs her delicate and most healthy Honey, but also with the good example of their painefull diligence and trauaile, encorageth man to labour and take paines, according to his calling: in such sorte, as it seemeth the almightie and most excellent maiestie, hath of all other specially created this little poore creature, for the benefite and commodity of man: by whom, besides the commoditie of the Honey and Ware that they make, wee might both take example to spend our life in vertuous and commendable exercises, and also to honour and reuerence the wonderfull bountie and goodnes of the most gratious LORD shewed towardes vs, in the creation of this final and profitable Worme. They are continually busied in labouring, they shewe great cunning and workemanship in their trauailes, they haue alwaies amongest them the liuely Image of a perfite common wealth, they yelde obedience to their Prince, not liking the gouerment of sundry heads, but loue to bee ruled by one: eache one of them laboureth and trauaileth in his charge, in so much, as the wisest Gouernours and Councellours in Common-weales, haue taken the Bees for their Patterne in chosing of Princes, distributing of Offices, rewarding of vertues, and punishing malefactours. *Varro* did alwaies call them the birdes of the Muses, and *Virgill* with wonderfull colours, doth eloquently set forth the Bees, their Common weale, Pallaces, buildinges, Cities, Lawes, manners, warres, and trauailes, supposing them to bee partakers of reason, and that they haue some inkling from aboue, in that they so neare resemble the

Industrie of Bees.

Bees their common-weales.

The birdes of the Muses.

mindes of men, yea manie times excell them; teaching their obedience to their Prince.

Virgil. *Not Egypt in his Prime, nor Lydia large and wide,*
Ne yet the Parthian people great, nor all the Medes beside
Do so their king obey, who being safe and well,
Their minds are all together one, he onely beares the bell.
On him they cast their eies, and gard him day and night,
And oft they beare him on their backes, in his defence they fight.
But if he chance to die, then all is dasht and done.
Their Coames a sunder downe they teare, and all to ruine run.

If the king bee taken, the whole Swarme is had: if he be gone, they disperse themselues abroad, for they can not liue without a king, hating as well the headlesse gouernment, as the subiectiō to many heads. If the king, or (as we terme him) the master Bee die, the whole Swarme droupeth and mourneth, they straightwaies cease from gathering of Hony, they sturre not abroade, but onely with a heauie and sorrowful humming, they swarme and clusker togither about his bodie. The nature surely of this poore creature is greatly to be wondred at.

Virgil. *They onely of their broode haue common care,*
And neighbour like their houses nearely stand:
And ruled are by lawes that none do spare,
Alone they know their home and natiue land,
And mindfull of the stormy Winter neere,
In Sommer get, to liue by all the yeere.

Their Princes Pallace is sumptuously built, in some seuerall part of their Hyues, being mounted aboue the rest, which if you happen to browse, you destroy the broode. They liue all as it were in a Campe, and duely keepe their watch and ward, working together, and oftentimes sending abroad their Colonies, they are warned at their Captaines appointment, as it were with the sound of a Trumpet, by which they know both their times of warres, and truce: they ward all the day time at their

their gates in warlike manner, and haue great silence in the night, till one of them in the morning humming out the discharge of the watch: they get them abroade to their businesse, as the Poet hath eloquently expressed.

Together all they quietly do lie,
Together all they toile with equall might:
And in the morning foorth together flie,
And home as fast they come againe at night.
Where as they lay their wearie limbs to rest,
And trim their wings, and set their legs in frame:
Till euery one himselfe hath throughly drest,
Then singing at their doores a while they game.
Till one giues warning for to go to bed,
Then downe they lay to rest their sleepie head.

Virgil.

For when the sléepie time of the night coms in, they make lesse and lesse noise, till one of them goeth about with the like sound that he gaue in the morning, setting as it were the watch, and giuing them warning to go to rest: at which time they all suddenly holde their peace. In the morning (as I saide) at the discharge of the watch, they roame straight to the gates, but fly not abroad, except they sée the weather wil be faire: wherof by nature they haue perfect vnderstanding.

Nor from the Hiues, if likely it be to raine,
They far do stray, nor trust they will the skie:
If that the Southwind blowe, but still remaine.
At home, or busied be with waters nie.
Short flytes they make, and when such stormes they see.
They beare about the smallest stones they finde:
And as the Botes in studdes that balast be,
So with the same they counterpaise the winde.

Bees foreshewers of stormes.

Being loded, they flie with the wind: if any tempest suddenlie arise, they counterpaise themselues with little stones, flying in the winde as neare the ground as may bée: their labour, both

both at home, and abroad, is certainly appointed. They labour at the first, within the compasse of threescore pace about the Hiue, & when the flowres there haue been sufficently wrought, they send abroad their discouerers to finde out more foode. And when they fall all together to their businesse, some worke the flowers with their feete, others cary water with their mouths, and droppes in their little fleeses: the yong lustie fellowes labour abroad, the elder at home. Those that goe abroade, doe with their forelegges lade all their Thighes, which nature for the nonce hath made rouffe: thus being loaded, Legges, Head, Backe and all, as much as they may beare, they return home, where there waighteth commonly three or foure at the dore to vnloade them. Within all this while are some laying in order, some building, some making cleane, and some making readie their meate: for they feede not seuerally, for feare of beguiling one the other. They frame their houses archwise within the Hiues, with two passages, so as they may enter one waye, & go out an other. Their Coames that they make are wrought full of holes, which holes (as *Varro* saith) are their Celles, or lodgings, made euery one fiue square, according to the number of their feete: these Celles they doe all fill with Honie, filling euerie one in a day or two. These coames are fastned to the vpper part of the Hiue, and hang a little vppon the sides, not cleauing to the Hiue, being nowe cornered, nowe rounde, according to the fashion of the Hiue, as both *Plinie* reporteth, and I shall hereafter shewe you, when I speake of the framing of the Coames. The Coames are kept vppe from falling, with small Pillers and proppes belowe, so built as they may go rounde about to repaire them. The three first loftes of their Celles beneath, are left emptie for feare of the Hiue: the vppermost are as full as may be. Such as are loiterers and idel vagabondes amongst them, are noted, and punished with death.

The punishment of loiterers.

Some range for foode and ply the feeldes abroad,
Some still at home do labour busilie:
And rounde about with ware the Hiues doe loade,
Which from the gummes they painfully do try.

The

The first foundations for the Comes they make,
And clammy cleauing Wax they fasten by:
While others of their broode the charge doth take.
And fosters vp the seede that shall supply.
Another sort doth worke the Hony pure,
And filles the Celles with licour that you see:
And others are appointed to the doore,
To looke abroade what weather is like to be.
Or to vnload such as haue laboured well,
Or els to driue the drousie Drone away:
Their labour smokes and all of time doth smell.
The Hony sweete that in their Coames they lay.

And a little after.

The great do guide the Hyue,
Make fast their Coames and Pallaces contriue.

CHENOBOSCVS. Of the worthines, trauaile, workmanship, and good order of this little creature, you haue sufficiently spoken, it nowe remaines that you declare vnto vs their sundrie kindes, their keeping, and their ordering.

MELLISSEVS. *Aristotle* maketh many sortes and kindes of them, wherof he counteth the short speckled and well knit, to be best: and next to them, the long ones like Waspes: the thirde, the kind that they call the Theefe, with a very large bodie: the fourth, the Drone, being bigger then all the reste, wanting both his sting, and courage to labour: and therefore they vse to make at the entrie of their Hiues small Grates, wherein the Bee may enter, but not the Drone. And the same *Aristotle* in the Chapter before saith, that there are two kinds of kings, or maister Bees, the one of a golden colour, which is counted the best, the other black, and more party coloured: they be twise as bigge as the other Bees, the Tayles of them as long as one and a halfe of the other, they are called of some, the mother Bees, as the cheefe breeders, because the yong of the Drones are bred without a king, but the other Bees neuer.

The kindes of Bees.

The Theefe.

The Drone.

Breeders.

Virgill

The best sorte of Bees.

Virgill following herein *Aristotle*, doth most commend the little, long, smooth, and faire Bée, and making mention of two sorts of kings, the worser wherby he shall do no harme.

Destroy (saith he) and let the other liue,
Whose golden hewe doth glister in the eie:
And decked with glittring skales faire shewe doth giue,
Of farre more grace and farre more maiestie.
With lothsome looke the other doth appeere,
And dragling drawes his taile with heauy cheare.

The shape of the king.

And as there is two sortes of kinges, so is there of the other Bées.

Some ougly seeme, and some againe doe shine,
Bedasht with drope of golden colour fine.

Being milde and gentle: for the Bée the greater hée is, the worse hée is, and if he bée angry, and fierce, and round, hée is worst of all. And because (as I said before) the best are onely to be medled with, sithe the good and the badde are alike chargeable, and require like tendance, and speciall héede to bée had that you meddle not the badde with the good: for lesse will the encrease of your Honie bée, if some of your Swarmes, be ill matched. You may store your selfe with Bées three maner of waies, either by bying them, taking the wilde Swarmes, or making them by art. Such as you bie, let them be of the kind and shape that I tolde you of, and bée sure before you bie them, that the Swarmes be whole and greate, which you may iudge by lowking into the Hiues, or if you can not be suffred so to doe, you may gesse it by other tokens: as if so bée you sée great numbers clustering at the doore of the Hyue, and if you heare a great huzzing and humming within: or (if they bée all at rest) putting your lippes to the mouth of the Hiue, and blowing therein, you shall easely perceaue by their answearing sound, whether their number bée greate or no. In bying of them beside, you must lowke whether they bée sounde, or sicke: the signes of

What to be considered in buying of Bees.

their

their being in health (as shal be shewed when I speake of their diseases) is, if their Swarmes be great, them selues faire, and wel coloured, and worke lustily. Againe, a token of their not being well, is if they bee heary, looke lothsomely, and dustelie, except at such time as they labour: for then they ware leane and roffe, with extreame trauaile. You must make your coniecture likewise by their age, such as are not aboue a yeere olde, looke faire and smoth, and shine, as if they were oiled: the olde ones are both in sight and feeling, roffe and rugged, and by reason of age, wrinkled: which neuertheles for cunning in making their Coames, experience, industry, and skilfulnesse in the weather, doe farre passe the others. In any wise see that you bie them rather from your next neighbour, then from a strange Country, or far off: for they many times perish by change of aire, or shaking in the carriage. And if you bee driuen to carry them farre, take heede you neither iogge, nor iumble them: the best way to carry them, is vppon a mans shoulders, and that in the night time, suffering them to rest in the daie, and pouring into them such sweete things as they delight in, and keeping them close. It is better remouing them in the spring, then in Winter: for they doe not so well agree with winter. If you carry them from a good place to a barraine, they wil straightwaies bid you farewell, and forsake their Hiues. When you haue brought them to the place where you meane they shall stand, if it be day time, you must neither open them, nor place them till it be night, to the end they may after the quiet rest of the night, go cherefully to their worke the next morning. Be sure to marke them well beside for two or three daies after, whether they go all out or no: for if they doe, it is a shrewde signe they will away. Some time, if the place be good, you shall assay to store your selfe with wild Bees: for although that Bees (as *Plinie* saith) can not be rightly termed either wilde, or tame, yet *Varro* calleth them wild, that breede in wild places, and tame, such as we keepe at home: and affirmeth the manner of keeping them to be diuers. There is great store of the wilde sort in *Sarmatia*.

Transporting of Bees.

The taking of Bees.

PVLLARIVS. They saye, that in *Liuonia*, and *Sarmatia*, (from whence is brought hither great store of Ware, and

Hony) the countrey people doe gather it in great abundance in hollowe trées, and desart places.

MELISSEVS. The greatest token of Bées, and Hony néere, is where they be in great numbers about the waters: for if you sée the number but small, it is a signe it is no good place for Bées: and if so be you sée they come in great numbers, you may soone learne where their stockes be in this sorte, as *Columella* and others haue taught. You shall carry with you in a saucer, or such like thing, some redde colour, or painting, and standing néere to the springes, or waters thereaboutes, as fast as they come, touch them vppon the backes while they are a drinking, with some little strawe dipped in the colour: and tarrie you there, til such time as you sée them returne. If the Bées that you marked doe quickly returne, it is a token their houses be not far off, if it be long ere they come, it shewes they dwell farther off: wherfore you may iudge by ỹ time. If they be néere, you shall easely finde them, if they be farre off, you shal come to finde them in this sort: take a péece of a Réede, or a Ker, with his knottes and iointes, and making a small hole in the side, powre into it either Hony, or some swéete thing, and lay it by the water: and when you sée the Bées haue found it, and entered the hole for the sauour of the Hony, stop you the hole with your thombe, and let but one go out at once, whose course you shall followe, as farre as you can sée him: and this shall bring you part of the way. When you can no longer sée him, let out an other, and follow him, and so an other, one after an other, til you come to the place. Others vse to set some little vessels with Hony by the water: which, when some one Bée or other hath hapned to taste, she giueth straight knowledge to her fellowes, whereby by their flying in number, they come to finde out their dwellings. If you finde the swarme to be in some such hole as you cannot come at them, you shal driue them out with smoke, and when they be out, bring them downe with the ringing of a lattin bason, so as they may settle vpon some trée, from whence you shall shake them into your Hiue. If the swarme be in some hole aboue in the branches, you may sawe off the branch handsomely, and couering it with a white cloth, place it amongest

To finde out the Bees.

your

your Hiues. If they bee in the bodie of the Tree, then may you softly sawe of the Tree aboue the Bees, and afterward, close vnderneath them: and being couered as before, carrie them home, stopping well the chinkes, and riftes, if there be any. He that seeketh the Bees, must beginne in the morning, that he may haue the whole day before him to marke their labouring. Thus farre of the kindes of Bees, and getting of them: nowe will I shewe you of the placing of them, ordring and keeping of them. The place for your Bees and your Hiues must be so chosen, as they may stande quietly, and secret, standing specially in such place, as they may haue the sunne in winter, and in the spring time alway at the rising, and such as is neither too hotte, nor too cold: for the excesse of either, doth hurt them) but rather temperate, that both in Sommer and Winter, they may haue moderate warmth, and holsome aire, being farre removed from the companie of either man, or beast. Standing for Bees.

Where neither wind may come, whose blasts forbids
Them bringing home their loade, nor Sheepe, nor wanton Kids,
To spring among the flowers, nor warding best,
Shake of the dewe, and trampling spoile the rest.

For they most of all delight in quietnesse: beware beside, that there be no hurtfull creatures nere them, as the Tode, that with his breath doth both poison the Bee, and also drawe th to him, the Woodpecker, the Swallowe, the Sparrow, the Storke, Spaidars, Harnettes, Butterflyes, Serpentes, and Mothes. What vermine annoyeth the Bees.

Dryue from thy Hiues the hurtfull Lysart greene,
Keepe, Throstels, Hennes, and other birdes vntrewe:
And Progne, on whose brest as yet is seene,
The blooddy marke of hands that Itys slewe.
All these destroy thy Bees, and to their nestes do beare,
Such as they take in flight, to make their yoong once cheare.

Of such thinges as hurt your Bees, I will hereafter speake more, where I shall shewe you of their diseases and harmes: in

the meane time I will go forwarde with the placing of them. The place where they shoulde stande, woulde rather be in the valley, then very hie: but so as the rebound of no *Ecco* doe hurte them, which sounde is verie noisome vnto them: so shall they flée with more ease and spéede to the higher places, and come laden downe againe with lesse trauaile. If the seat of the house will so suffer, it is good to haue your Bées stande neare your house, and to be enclosed with a hedge, or a pale: but on such side as they be not annoied with the sent of sinke, priuie, or doung-hill. The best standing, is within the sight of the maister, by whose presence they are safest kept. For their better safety (if you feare them) you may sette them a yarde or more from the ground, enclosing them with little grates left open against euerie Hiue, or so lettised with stone, as the Bée may easely come out and in, and scape both Birdes and Water: or if you list, you may make a little house by for the kéeper, wherin you may lay your Hiues for your swarmes, and other necessaries méete for your Bées, setting neare to the Hiues some shadowing Trées for them to swarme vpon, according to the Poets aduise.

The valley better for the Bee, then the hill.

And plant the Date tree neare, or pleasant Ollue tree
That with their flowry branches sweet, thy Hiues may shadowed be:
That when the captaines yoong, lead out their lusty swarmes,
The pleasant shade may them allure, to shun the greater harmes.
Not needing for their ease, in places farre to roame,
When as they may more safely sit, and better speede at home.

If it may be, let them haue some faire spring neare them, or els some water conueied in pipe: for without water they can neither make Hony, Ware, nor brœde vp their yong: and therfore saith the Poet.

Faire water necessarie for Bees.

Haue fountaines sweete at hand, or mossy waters greene,
Or pleasant brooke that passing through, the meades is sweetely seene.

And straightwaies after.

If either standing poole be neither to them nie,
Or running streame with hastie course, their dwellings passeth by,
Cast bowes of Willowe crosse, and mighty stones withall,
That may preserue the fainting Bee, that in the flud doth fall.

Rounde

Round about the Bèeyard, and neare to the hiues, set hearbes, plants, and flowres, both for their health, and profite: specially such as are of the swètest and delicatest sauour: as *Cithysus*, Thime, *Cassia*, Rosemary, Sauery, Smallage, Violettes, Sage, Lauender, Myrrhe, wilde Marierum, wilde Thyme, Balme, swète Marierum, Saffron, Beanes, Mustardsède, Poppey, Mellilot, and Roses. And if there lie Grounde nère it for the purpose, sowe it with Rape sède, and Bèechwheate: for they wonderfully delight in the flowres hereof. *Plinie* writeth, that Bées delight greatly to haue brome flowres neare them: of trées, they most delight in these. The Pine, the Willowe, the Firre trèe, the Almonde, the Peache, the Peare trèe, and the Apple, and such as the flowres thereof be not bitter. Of the wilde sortes, the Terebinth, the Lentise, the Lindtrèe, the Cedar, and the Maistholme. The best Hony (as *Palladius* saith) is made of Time: the nert of wilde Time: the thirde, of Rosemary. You must remoue from your trées, Yew trèe, the Bore, and the Cornell: *Plinie* would also haue the Oliue awaye. Banish also all the kindes of *Sporge*: for with that, as also with the flowres of the Cornell, they fall into a Flixe and die. Besides, you must suffer no Wormewood, nor wilde Coucumber, to growe nère them: for they both destroy the Bées, and spoile the Hony. And because the flowre, or fruite of Elmes doth specially hurt them, therfore in such partes of Italy where plentie of Elmes growe, the Bées doe not long continue. Touching your Hiues, they are made of diuers fashions, according to the maner of the Countrey. Some are made rounde, some square, some three fot in height, and one in bredth, made very narrowe toward the top, least the Bèe shoulde ouerlabor themselues in filling of them. Some make their Hiues of Lanterne horne, or Glasse, to the end (as *Plinie* saith) that they may viewe the maner of their working. *Varro* maketh mention of earthen Hiues well plaistred within and without with good Dre doung, so as the roffenesse and ruggednesse cannot displease them: but for all that, the earthen Hiues be the worst that may bée, because in Sommer they bée to hotte, and in Winter to colde. The best Hiues, are those that are made of Corke wicker, or rindes of trées, because they kèepe out both colde and heate: the nerte

Hearbes that Bees delight in

Hearbes noisome to Bees.

Of the Hyues.

are such as are made of Strawe and Bentes matted together, two foote in breadth, and so much, or more, according to the number of your Bees in height. In some places they make them of one peece of wood, cut and hollowed for the nonce, or of ioined bordes, fiue or sixe foote in height, and these neither are too hotte in Sommer, nor to cold in Winter. Of these wodden Hiues, the best are those that are made of Figge tree, Pine, Ashe, and Walnutte, of such length (as I tolde you) and a cubite in breadth. Besides, they woulde be couered with either Lime, or Dre doung: for so (saith *Florentine*) you shall keepe them long without rotting. You must also boare them through slopewise, whereby the winde gently entring, may dry vp all Cobwebbes, or such like noiances. You must alwaies haue good store of Hiues lying by you, that may be remoued and easily carried where you list: for the fired, or standing Hiues, bee discommodious, as which you can neither sell, nor remoue: though *Celsius* seeme to commende the standing Hiues, because they are neither subiect to stealing nor burning, being made of Bricke, or Loame. Your Hiues (as *Columella* out of *Celsius* doth teach) must stande vppon some table of stone, a yarde from the grounde, and so much in bredth, so smothed and plaistered, as neither Toade, Cuette, or Snake may creepe vppe: and in such order they must be placed, as there may be betwirt euerie one a little wall, or partition, being open both before & behind. If you haue no such partitions, then place them so, as they be a prettie way distant one from the other, that in dressing and looking to any one of them, you shake not, nor hurt the other: for a little iumbling doth some marre al their houses, and many times spoile the Bees. It is enough to haue three rankes of them, one aboue the other: for the keeper shall haue enough to doe, to ouer loke the vppermost. The part where the Bee doth enter, must stande a little lower then the hinder part, so as the raine can not run in, and the water (if there be any) may easely voide. And because colde doth more annoy the Bee, then heate, you must arme your Hiues well behinde, against the hurt and bitternesse of the North wind, and let the sunne come bountifully to them in the Front. And therefore it is best for you to make the holes where they come in and out, as small as

How you must place your Hiues.

you

you may, that they suffice onely for the bigneſſe of the Bée, partly for auoyding of cold, and partly to kéepe out Ewets, Béetels, Butterflies, Battes, Mothes, and such other hurtfull vermine, that would otherwise destroy the Combes: wherefore it is good you haue two or three such small holes together in euery Hiue, for the commoditie of the Bée, and restraint of the enemie.

PVLLARIVS. Well, I pray you let vs know when the Bée beginneth to labour, and when he ceaseth.

MELLISSEVS. Because I haue declared vnto you before their toile, their diligence, and order of their trauaile, I will nowe likewise shewe you what time they begin to labour. In the winter time, from the setting of the seuen starres, til the beginning of the spring, they kéepe their houses, and come not abroad, by reason of the cold: in the spring, they come straight abroad, and from that time forward (if the wether let them not) they neuer rest day. First of all, they frame their Combes, and War, that is, they make their houses and chambers, wherof they make so many, as they thinke them selues able to fill: then fall they to bréeding, and last of all, to making of Hony. Their War, they make of the flowres of Trées and plantes: their Hony, of the gummes and clammineſſe of trées that are glewy, as Willowe, Elmes, Réede, Iuice, Gumme, and Rozen: *Aristotle* saith, they make their Combes, of flowres, their War, of Gummes, and their Hony, of the dew of the ayre, that falleth chéefely at the rising of the starres, and that there is no Hony made before the rising of the seauen starres, and their Combes of flowres, and that the Bées doe not of them selues make the hony, but onely geather the honied dewe that falleth, because the kéepers finde the Celles to be filled in some one, or two daies: and that the Hony being taken away in the ende of Sommer, the Hiues are not found to bée furnished againe: though there be flowres enough at that time. This, and much more hereof (saith *Aristotle*) whom *Plinie* following him, affirmeth Hony to be made of the ayre, most of all, at the rising of the starres, chéefely the Dogge shining out early in the morning: therfore you shal find in the morning betimes, the leaues of the trées bedewed with Hony, as you shall likewise haue the

When the Bee resteth.

The beginning and order of his trauaile.

Apparayle, Heare, and Beardes, of such as haue bene early abroad. In the morning, our common people call it Manna, or Hony dewe, cleauing to the leaues before the rising of the sunne as it were snowe, or rather candied Suger. Whether it bee the sweate or excrement of the Heauens, or a certaine spittle of the starres, or a iuyce that the ayre purgeth from him selfe, how so euer it be, I would to GOD it were such as it first came from aboue, and not corrupted with the vapours and dampes of the earth. Besides, being sucked vp from the leaues by the Bees, and digested in their Mawes (for they cast it vp at their mouthes) and also distempered with the sent of the flowres, ill seasoned in the Hiues, and so often altred and transformed, losing much of his heauenishe Vertue, hath yet a pleasant and a speciall celestiall swetenesse in it. The best Hony is of Time (as I haue saide before) and good likewise of *Cithisus*, of the Figge tree verie pleasant: *Varro* saith, they take not their sustenance, and their Hony both from one. A greate part of their foode is water, which must not bee farre from them, and must be verie cleane: which is greatly to purpose in making of good Hony. And when euerie season suffereth them not to be abroad, they must at such times bee fedde, least they should then be forced to liue all vppon the Hony, or to leaue the Hiues emptie. Some geue vnto them, Water and Hony sodden together in little vessels, putting into it Purple wole, through the which they sucke it, for feare of drinking too much, or drowning themselues: others, drie Figges, either stamped by themselues, or mingled with water, or the drosse of grapes, or Reasons mingled with swete wine, and tostes made therewith, or with Hony: yea I haue seen some vse (but in my fansie without reason) to giue them Bay salt. Moreouer, as the Bees require great looking to continually, and their hiues daily attendance, so most of al they craue diligent regard, when they are about to swarm, whereunto if you haue not a greate good eye, they will bidde you farewell, and seeke a newe Master. For such is the nature of Bees, that with euery Prince, is bredde a common wealth, which as soone as they are able to trauaile, doe as it were disdaine the gouerment and fellowshippe of the olde Bee, which most happeneth when the swarmes be great and lusty, and that the

Manna.

The best Hony of Time.

Bees, their winter foode.

Going away of Bees, and the tokens thereof.

the old stagers are disposed to send abroade their Colonies, and therefore you shall by two tokens specially knowe, when the newe Princes with their people will abroad. The first, when as a day or two before they cluster and hang (specially in the euening) about the mouthe of the Hiue, and seeme to shewe by their comming out, a greate desire to bee gone, and to haue a kingdome and countrey by them selues: which, if you prepare them at home, they content them selues very well with it. And if the Keeper prouide not for them, taking them selues to bee greatlie iniuried, they depart, and seeke a newe dwelling. To preuent this mischiefe, *Columella* willes you to looke diligently to them in the Spring time about eight of the clocke, or at noone: after which hours, they commonly goe not away, and to marke wel their going out, and comming in. The other signe is, that when they are ready to flie, or going, they make a great humming and noise, as souldiers ready to remoue their campe. At their first comming out, they fly aloft playing vp and doune, as it were tarrying for their fellowes, till all their companie come. Yea, many times the olde inhabitantes, beeing weerie of their dwellinges, doe leaue their Hiues which is perceiued when they come so out, as none remaine behind, and presently mount into the aire, then must you fall to ringing of Pannes and basons, to feare, or bring downe the runawaies, who being amased with the great and suddaine noise, doe either presently repaire to their olde Hiue, or else knitte themselues in swarme vppon the branch of some tree neere to the place: then must the keeper out of hand be ready with a newe Hiue prepared for the purpose, and rubbed with such hearbes, as the Bee delightes in, or sprinckled with little droppes of Hony (I haue seene in some places vsed Creame) and so shaking them into the Hiue, and couering them with a sheete: let him leaue them till the morning, and then set them in their place. He must (as I tolde you before) haue diuers newe Hiues in a readinesse to serue the turne withall. And if so bee you haue no Trees nor bushes growing neere the Hiues, you must thrust into the ground certaine bowes and branches for the purpose, whereupon they may knit and settle them selues, and rubbe ouer the bowes with Balme, or such pleasant hearbes, that when they

(as

Bees delight in newe Hiues.

(as I say) knitte and settle, putting vnder the Hiue, and compassing them with some little smoake, you may cause them to fall into a newe countrey: for they will rather goe into a newe Hiue, then into an old: yea, if you offer them the Hiue that they came from, they wil forsake it for a newe. Some of them wil sodenly leaue the Hiue without any tarrying, which ỹ keper may perceaue, if he vse to lay his eare in the night time to the hiues: for about three daies before they goe, they make a great noyse, like souldiers ready to raise their campe: which *Virgil* noteth.

Signes of suddaine departing and remedies.

Their minds are easely knowne for such as stray,
The brassen sound commands to come away.
When through them all a warning voice is sent.
That doth the warlike Trumpet represent.

And therefore when such noise is heard, they must be very wel watched, whether they come out to fight, or to flée, the képer must be at hand: their fights, whether it be among themselues, or one Hiue with an other, are easely stickled.

A little dust cast vp on hie,
Doth ende the quarrell presentlie.

Or Honied water, swéet Wine, broth of Reasons, or any pleasant licour, wherein they delight, cast and sprinckled amongst them, doth straightwaies part them. The selfe same remedies makes two Princes of them, being fallen out, to bée quicklie good frindes againe: for when there happeneth many times to be in one Hiue sundrie Kinges, by whose dissention the whole number of the subiectes in the princes quarrels, goe togeather by the eares, you must by all meanes séeke to remedie it, least by cruell dissention, the poore people be destroied. And therefore, if you perceaue them often to fight, your best is to kill the heddest of the dissention, and to appease the fury of the fighters, by those meanes that I told you before. And when the Marciall swarme is setled vpon some branch of a trée, loke if they hang al togeather like a cluster of Grapes, which is a signe, that there is either but one king, or if there bée moe, they be agréed: and then you shall not trouble thē, but take them into the Hiue, but if so be they hang in two or thrée clusters, like the pappes, or vdders of a beast, it is a signe there are diuers master Bées that agrée not together: for which you shal search, where you sée the Bées

Diuers kings in one Hiue.

to

to clusker most. Therefore annointing your handes with the iuice of Balme, or Bæwort, that they may abide you, thrust in your fingers softly amongst them, & shedding the Bées, search well, til you haue found the ringleader of the dissention, whom you must take away. What the proportion & shape of the king is, I haue told you a little before, that is, somthing longer then the other Bées, and lesser wingged, of a fair & glistering colour, smoth, & without sting. Howbeit, some of them be shaghearde, and ill coloured, which are naught, & to be killed. *Let the best (as he saith) weare the Crowne,* who must himselfe also bee depriued of his wings, if he bee to busie headed, and will alwaies be carrying his people abroade. So shall you with the losse of his sailes, kéepe him at home spite of his téeth, while he dare not for want of his wings venture out of the doores, and so shall he kéepe his people at home. *Didymus* wryteth, that your Bées will neuer goe away, if you rubbe the mouth of your Hiue with the doung of a new calued calfe. To the same end serueth it, if you stampe the leaues of wilde Oliues, and Garden Oliues together, and annoint the Hiues in the euening therewithall, or if you wash the Hiues and the wals with Hony sodden in water. When an olde stocke is come to a small number, and that there bee not Bées enough to furnish the Hiue, you must supply the wante with a newe swarme, destroying the king of the first swarme in the spring, so shall both the swarmes dwell together in amitie with their olde Parents, as shall be shewed you hereafter, where I meane to speake of repairing the stocke. The sommer being past, ensueth the time for taking of Hony: to which Haruest, the trauaile of the whole tendeth. The time for gathering thereof, *Columella* teacheth to bee then, when wee perceaue the Drones to be driuen out and banished by the Bées: for, thence they *Dryue the drousie Drone away.* This Drone is an vntimely birth, & an vnperfect Bée, but very like vnto the Bée, saue that he is bigger bodied, lying alwaies idle in the Hiue, not labouring himselfe, but féeding like a lubber of the sweat of his fellowes, yet serueth hee for the brééding and bringing vp of the yong: which when hée hath done, they thrust him out of the Hiue, *Varro* appointeth three seasons for taking out ỹ hony: the first, at the rising of the seuen starres: the second, in sommer: the third,

The shape of the king.

To keepe the king at home.

Gelding, or driueing the Hiues.

The Drone.

Time for taking the Combes.

third, at the setting of the seuen starres: this signe is when the Hiues be heauie, and that they bee double furnished. You may make your coniecture by the Bées, when they make great noise within, and when you see them stande daunsing and playing at their doores, as also if looking into the Hiue, you perceiue the mouthes of the Coames to be couered with a Hony filme. *Dydimus* thinketh it to be the best time for the first haruest, the rising of the seuen starres, or the beginning of May: the second the beginning of *Autumne*: the thirde, the setting of the seauen stars, which is about October. Howbeit, these times be not alwaies precisely to be obserued, but according to the forwardnesse of the season: for if so bee you take the Hony before their Coames be readie, they take it ill, and presently leaue worcking. The time for gelding, or driuing your Bées, is earely in the morning: for you must not at noone trouble your Hiues. For this kind of gelding of your Hiues, you must haue two instrumentes for the nonce, a foote and a halfe long, and more: the one of them must be a long knife of a good breadth, hauing at the ende a bending crooke to scrape withall: the other must bee plaine, and verie sharpe, that with the one you may cut the Coames, and with the other scrape them, and drawe out what soeuer Dregges or filth you finde in them. And if your Hiues be not open behinde, you shall make a smoke with *Galbanum*, or drie doung, being put into an earthen pan made for the purpose, small at the one end, from whence the smoake shal come, and broad at the other, from which you shall blowe vp the smoke from the fire, in such sort, as *Columella* sheweth you. This pot you must suffer at the first, to smoke into the Hiue, and afterward rounde about without, and so shall you driue them. He that medleth in this case with the Bées, must specially keepe himselfe from lecherie, and drunkennesse, and wash himselfe cleane: for they loue to haue such as come about them to bee as pure and cleane as may bee. They delight in cleanlinesse, so much, as they themselues doe remoue from them all filthinesse, suffering no filth to remaine amongst their labors, raking vp in heape together the excrement of their owne bodies, which in rainie daies, when they worke not abroade, they remoue & throwe out of the Hiue. If you set garlick by them, they wil sting al that come nere them.

Bees hate theeues and vncleane persons.

Their

Their anger is chefely asswaged by the presence of these that vse to tende them, at whose comming they ware wilder, beyng well acquainted with those that are their kepers. If there be two swarmes in one Hiue, and agreed together, they haue two sortes and maner of Coames, euery swarm obseruing his own order, but all the Coames so hang by the roffes of the Hiues and sides, as they touch not the grounde where the Bées vse chefely to walke, as I saide before in their building of theyr Coames. The fashion of their Coames, is alwaies according to the fashion of their Hiues, sometimes square, sometime rounde, sometime long as the Hiues are, in which they are fashioned as in a moulde. *Plinie* writeth, that there were Honie Coames found in Germany, of eight fote in length, but howsoeuer they be, you must not take them all out, but must vse discretion in taking of them. Amongst our people in the first, be harueft (if I may so terme it) they vse with their crooked knife, to pare away no more but the emptie Celles, till they come to those that be full, taking good hede that they hurt them not: and this they doe in the spring. In the latter Harueft, that is, at the ende of Sommer, they take the Coames full of Honie, in such sort (as I tolde you) burning the olde Bées, and alway képing and preseruing the yong swarmes. In the first taking, when the Meddowes are full of flowres, they leaue the fift part of the Coames behinde: in the latter harueft, when winter approcheth, they leaue a third of their Coames, for the sustenance of the Bée. But this quantity cannot certainly be prescribed for all Countreies, but must be measured according to the aboundance or want of flowres. *Dionysius Thaseus*, thinketh good to leaue them a tenth of their Coames in the Sommer time, if the Hiues be verie full, otherwise according to the proportion: and if they be emptie, not to meddle with them. *Plinie* woulde not haue the Hony of the spring time (which he calleth flowre Hony) to be medled withall, but to be spared. Others leaue no Hony at all for them, because of the aboundaunce of flowres that are then springing, which is the chefe foundation of their Coames. Such as bée skilfullest, doe leaue the Bées a twelfth part of their labour: and this they doe about a thirtie daies after

Fashioning of the coames.

after the ſwarme, which they make an ende of commonly in May. The olde and the corrupt Coames, are for the moſt part at this time taken away, and the ſounde, and ſuch as are filled with Hony, left: in taking of the Hony at the latter time of the yeare, they vſe to deſtroy the oldeſt ſtockes, to ſaue the charges of feeding of them. This driuing and gelding of Hiues, is not commonly vſed in the Countrey, but they rather according to their cuſtome, at the end of the yeare burne them, alleaging for their auctoritie an olde Engliſhe Prouerbe of theyr owne. *Dryue Bees, and looſe Bees: burne Bees, and haue Bees: and in ſome places they drowne them.* When you haue thus ſpoyled your Hiues, you ſhall carry all your Coames into ſome handſome place, where you meane to make your Honie, and ſtop vp all the holes and creuiſſes of the walles and windowes, as cloſe as you may: for the Bees wil be very buſie to recouer the praie. Your Hiues being thus driuen, if there be any ill placed Coames at the entrie, you ſhall alter them, and place them in good order, ſo as the toppes ſtande downeward, ſo when you next geld them, you ſhall eaſlier take out the olde Coames, and leaue the new, and the ware ſhalbe the newer: which the older it is, the worſe it is. Whenſoeuer you take out your Coames, loke that you ſtraine out the Hony the ſame daye, while they are hotte and newe. The Hony that you take at the full of the Moone (as *Plinie* ſaith) yeldeth moſt, and the fayrer the daye is, the thicker it is. The Coames being taken out, let them rather bee warme then heated, leaſt by ouer heating them, you ſtraine out the ware with the Hony: afterward, put them into a good ſtrong bagge, and with a Preſſe, or other inſtrument made for the purpoſe, or with a Wicker baſket, preſſe out the Hony, but ſee that before you preſſe it, you ſeuer from it ſuch Coames, as haue in them yong Bees, called wyth ſome Grubbes, or any red or ruſtie droſſe: for theſe with their euill iuice corrupt the Hony. When the Hony is thus ſtrained out, it is put into earthen veſſels, and ſuffered to ſtand vncouered a fewe daies til it haue wrought, and caſt vp aloft all his Dregs, which you muſt often ſkim off with a little ſticke: but in many places they are not ſo curious, but iumbled all together, and ſo

ſell

sell it grose as it is. The best Hony is alwaies in the bottome, as the best Oyle aloft, and the best Wine in the midst.

CHENOBOSCVS. What Countries yeldes the best Hony, and which count you best?

MELISSEVS. The best Hony was in the olde tyme thought to bee in *Athens*, and in *Cicyll*: it is nowe though verie good that commeth from *Moscouia*, and the Northeast Regions. The Hony at the beginning is thinne as water, and after the straining, it worketh like newe Wine, and spurgeth: at the twentieth daie, it wareth thicke, and afterwardes, is couered with a thinne rine, or filme, where the froth of the purging is gathered together. The best Hony, and least infected, the Bees doe gather from the leaues of the Oke, the Lindtree, and the Reede. There is three sortes of Hony, the best kinde is that which is called *Authim*, or flowre Hony, made in the Spring-time: the nert, is Sommer Hony, or hasty hony, made in thirty daies after the tenth of June, when the Dogge beginnes to come in, the thirde is Heath Hony, a wilde kind of Hony, and not allowed, being gathered after the first shewers of *Autum*, while the Heath is in flowre: and therefore like the Sandie Hony. The best Hony (as *Diophanes* saith) is cleare, yellowish, smoth in touching, and fine, roping, if it be drawen in length, and long, sticking together, clammy, and harde to be got a sunder: the Hony that is of the worst making, is to bee boyled. Bread, if it bee dipped in it, doth straight corrupt it, and therefore take heede you put it not where breade hath beene. The fragments of the Coame that haue once been prested, being taken out, heated, and strained againe, doe make a seconde Hony, which you must put vp, and keepe by it selfe, for spoiling of the other. Naughty, & counterfet hony, is discerned by the burning, for the ill Hony burneth not cleare, as the said *Diophanes* witnesseth. The drosse that remaineth, after the presling, after that you haue diligently washed it in sweete water, must be put in a brasse Caldron, and putting a little water thereto, melted vpon the fire, which when you haue done, you must strain the Ware through a Siue, or such like thing made of Strawe, or Rushes: and after seeth it againe, and powring it into some vessell with water,

The best Hony.

Three sortes of Hony.

Breade corrupteth hony.

The making of Waxe.

water, frõ whence you may easely take it, make it vp in cakes, or what fashion you like. *Plinie* writeth, that the Coames must first bee washed well, and afterward dried in the darke, for the space of three daies, and the fourth daye set vppon the fire in a newe earthen vessel, so as the Coames be couered with water, and then strained through a Ciue: last of all, boiled againe in the same vessell, and the same water, and so poured into vessels with colde water, hauing their sides nointed with Hony. The Ware will be verie white after it hath stand in the sunne, and beene twise sodden: you shall make it blacke with the ashes of Paper, and being mingled with Vermillion, it will be red, and so otherwise coloured as you list.

CHENOBOSCVS. If in the making of your Hony your Bees bee almost consumed, what waies haue you to repaire them?

Bees decaied. The repairing of them.

MELISSEVS. When as an olde stocke is come to bee small, and that you are to furnish out the number, you must destroy (as I said) the new king in the spring time, when there is a newe brode in the Hiue, that the newe people without discorde, may dwell with their olde parentes. And if so bee the Coames haue not yelded a newe brode, you must take the dwellers of two or three other Hiues, and put them into one, but so (as you remember before) to sprinckle them with some sweete licour, and so shut them vp with foode conuenient for them, til they bee fully acquainted, leauing but little breathing holes about the Hiue, and keepe them thus enclosed three daies. Others doe vse to kill the eldest king, but that *Columella* alloweth not: but if the king be very olde, (the age of Bees shall shortly be shewed vnto you) and the people alwaies giuen to sedition, then shal you chose a king from the Hiues, that haue most number of kinges. I tolde you before howe you shoulde make them agree, when you put two swarmes together, least they should destroy one another, that is, to take away the kings of the newe swarmes.

CHENOBOSCVS. What if the whole stocke be decayed by taking the Hony, or by sickneste and diseases, will they breede againe, or may they be repaired by art?

MELIS-

MELLISSEVS. By both, though the breeding and ingendring of Bees, is verie doubtfull with *Aristotle*, neither dare he after his long disputations, affirme any certaintie therof: sometime hee resiteth the opinions of others, some thinking that they are ingendred by copulatiõ, the drone being the male, and the Bee the female: Other saying, that they bring forth yong, but doe not ingender, but that they gather their yong ones, but from whence, they know not. Some say, from the flowres of *Marioram*: some, from the flowres of the Reede: others, from the Oliueflowres, because when soeuer there is great plentie of Oliues, there is also greate swarmes of Bees. There are againe that thinke the Drones to bee so gathered, and the Bees to be breede onely of the kinges: and a little after, he saith, The yong are best breede, when the Hony is made, they labour with their legges the Wax, and with their mouth they cast out the Hony into the Celles, and hauing laid their yong, they sitte vpon them as Birdes do. The little Worme, or Grubbe, being thus hatched while he is small, lieth crumpled vp in the Coame: afterward, sprawleth abroad by his owne force, and falleth to feeding, cleauing so to the Coame, as hee seemeth to be tied. The brode of the Bee, and the Drone, is white, of which commeth little Wormes, that after growe to Bees, and Drones: thus much, and more, saith *Aristotle*. In other places he would seeme to gather, that the Bees are ingendred of the kings, saying that if this were not, there were no reason for such thinges as are committed in their gouernment, and that the kinges by good reason remaine still in the Hiue without any trauaile, as onely borne for breeding. Beside, they be greater, as though their bodies were purposely framed for generation: and they punish the Drones. It is not very likely, that the children shoulde punish the Parentes, therefore the Bees are not ingendred of Drones. Besides, it is a great argument, that Bees are ingendred without copulation, that their brode lieth very small at the first, wrapped vp in the holes, or Celles of their Coames, whereas al other Flies and Wormes, that are bredde by copulation, doe long ingender, and quickly lay in greatnesse, according to the kinde of the Worme. *Plinie*

Breeding of Bees.

follwing herein *Aristotle*, affirmeth, that Bées doe sitte as Hennes dw vppon their Egges: and that which is hatched, is at the first a small white wozme lying crosse the hole, and cleauing in such sozt, as it seemeth to fœde. The king is at the first, of a yellowish colour, as a chosen flowze, framed of the finest substance, neither is he bredde a Wozme, but with winges at the very first. The other common sozt, when they begin to haue fashion, are called Nimphes, as the Drones, the *Sirens*, and the *Cepheus*, whose heades, if any man chance to pull of, they serue as a delicate fode to the brœders. After a little time, they powze into them fode, and sitte vppon them (making a greate noise as it is thought, to procure a heate necessarie foz their hatching) till breaking a sunder the filmes that encloseth euery one of them like an Egge, the whole brode commeth fozth. *Plinie* addeth, that this was sœne and obserued at Rome, in a Hiue made of Lanterne hoznes: the whole brode is finished in fiue and fourtie daies. As sone as they are brought out, they are taught to trauaile straightwaies with their dammes, the yong people waiting presently vppon their yong King. There are sundzy kinges bredde foz failing, and when they come to age, by common consent, the foulest and vntowardest of them are destroied. That there is two soztes, and what fashion they be of, I told you befoze.

CHENOBOSCVS. Let vs nowe heare something of their age.

The age of Bees.

MELISSEVS. Their age (they say) may thus be knowen. Such as are not aboue a yœre olde, doe shine, and loke as they were newly oyled: the olde ones bée rowffe, shagheard, wzinckled, lothsome, and ilfauoured to loke vppon, howbeit, foz making of Coames, these are the best. *Aristotle* in his boke befoze mencioned affirmeth, that Bées liue fiue oz seuen yœres, and that if a stocke continue niene oz tenne yœres, the kœper of them hath good lucke. *Plinie* wziteth, that one stocke was neuer sœne to continue aboue tenne yœres, not though you supplie the places of the dead euery yœre with newe: foz commonly in the tenth yœre after their first hiuing, the whole stocke dieth. And therefoze to auoide the mischiefe of being vtterly de-

stitute,

ſtitute, it is good to encreaſe the number of your Hiues, with newe ſwarmes euery yéere. And if ſo bée your Bées, through ſudden ſtorme, tempeſt, or colde, lie dead vpon the grounde, you muſt gather them togither into a platter, or a broade baſon, and lay them in your houſe toward the South, ſpecially if the weather bée good, after, caſt amongſt them Aſhes of Figge trée woode, being ſomething more hotte, then warme, ſhake them gently vp & downe, ſo as you touch them not with your hands, and ſo ſetting them into the ſun, they wil (as *Varro* ſaith) quicken againe. To whom *Columella* ſubſcribing addeth, that ſuch Bées as you finde dead vnder your Hiues, if you lay them vp in a dry place all the Winter, and bring them out into the Sunne in the Spring, when the weather is faire, and ſprinckle them with the foreſaid Aſhes, they wil recouer within a few houres. They that liſt, may proue it: I haue not hitherto tried it. *Marcus Varro* holdeth opinion, that Bées are ingendred ſometime of other Bées, and ſometimes of the bodie of a yong Bullocke putrified, reſiting this Epigrame of *Archelaus*.

To reuiue Bees that be dead.

Making of Bees.

Of Steere that ſtrangled is, are children ſtrangely bred,
Of Horſe ingendred is the Waſpe, and Bees, of Bullocke ded.
The Horſes breede the Waſpes, the Bullockes breede the Bees.

For a yong Ore, or Stéere, being ſtrangled, corrupted, and caſt into ſome ſuch place, where the putrified vapour cannot breath out, and ſtore of herbes and flowres agréeing with the nature of the Bées thruſt into the bodie, as Time, *Caſſia*, and ſuch like, wherewith the vapour may bée tempered, you ſhall hereof quickely haue Bées, euen as you may of the bodie of a Horſe likewiſe ordered, haue Waſpes and Hornettes. *Virgil* hath deſcribed both the maners of ingendring of Bées, and the firſt ſort, in theſe words.

This vſe, you woonder would, doth pleaſe the Bee,
The Chaines vnchaſt of Venus they deteſt:
To file themſelues with filthy lecherie,
They iudge vnmeete, nor will be ſo increaſt.

But from the plantes and pleasant flowres sweete,
They fetch their tender broode, and hence they get:
Both King and Court, and what soeuers meete,
To rayse their walles, and Empire vp to set.

Bees made of a Steere.

The other maners, or repairing Bées by art, the same Poete eloquently thus touched.

But if your Bees do happen all to die,
The breeders gone, that should the race renew:
His lesson learne, whose skilfull cunning hie,
Made Bees, with blood of Bullockes that he slewe. &c.

The maner how Bées are ingendred of a Bullocke, *Virgil* doth largely discourse out of *Mago*, and *Demberitus*. You must frame a little house foure square, about ten cubites in breadth, and as much in height, with foure windowes, on euery side one. A yong fatte Steere being brought hither, his Nose, his Eares, and al other open vents stopped, and filled with linnen, dipped in Pitche, must bée beaten with numbers of Clubbes to death, so as both the bones and the flesh, may be broken without any blood: for of the blood, commeth the Bée. Afterwarde, the house being déepe strawed with Time, and the Bullocke laide vppon his backe, the doores and the windowes must bée close shut vp, and so plaistred, as there can no aire enter. Three wéekes after, the windowes must be opened on euery side, saue where the winde bloweth strongest, & the light and the aire let in: when it hath béen wel cooled & refreshed, the windows must bée shut vp againe, and made as close as before: and being opened the eleuenth day after, you shal finde the house ful of Bées, and nothing left of the Ore, saue the hornes, the heare, and the bones: they hold opinion besides, that the kings are ingendred of the braine, and the other Bées of the body.

PVLLARIVS. I like not so costly comming by Bées.

MELISSEVS. Of the same opinion is *Columella*: I tell you but the order of the olde skilfull fellowes, you may chose whether you will trie it.

CHENO-

CHENOBOSCVS. I had rather you would tel vs what sicknesses and diseases they are subiect to, and howe we may know the sicknesses, and in what sort to helpe them.

MELISSEVS. I will willingly shewe you. The signes and tokens of their health, is if they be liuely quicke, and manie in number: if their workmanship be neately, and equally wrought: if they go about their businesse cherefully, and if they loke faire and smoth. Their signes of their not being in helth, is if they loke lothsomely, be rotte and heary, except in the time of their labour, when they commonly loke like labourers, or be drousie, or if you se them carrying out of dead carkasses, and following the corses, after the maner of mourners, or that you heare no noise, nor sturring amongst them. These signes when you se, *Columella* willeth you to giue them meate in little troughes of Reedes, specially Hony sodden, and grounde with Galles, or Roses. You must also to heale them, perfume them with *Galbanum*, Reazins, or olde strigges of Grapes. If the king happen to die, the common people waile and mourn with great heauinesse, neither wil they make any prouision for their owne sustenance: and therefore if you fede them not, they will famish themselues. Signes of sickneſſe in Bees.

PISSINARIVS. With what diseases are they most vexed?

MELISSEVS. They are many times infected with the pestilence, against which you haue no other remedie, then to seuer the Hiues farre a sunder. Their cheefest and earely sicknesse, is in the beginning of the Spring, when the Spurge and the Elme doe both flowre: for as vpon newe fruits, so at their first comming abroade, entised with these newe flowres, being almost hungerstaruen with the winter passed, they fede so gredilie, as they fall into a Flix, whereof if they be not quickly remedied, they die. For Spurge doth lose the bellies of al other creatures, but the flowres of Elme, bringeth onely the Flix to the Bee. And therefore in such Countries, where there is great plenties of these trees, the Bees continue but a while. *Columella* teacheth you against this disease, to giue them Rosemary sodden with Water and Hony: some againe vse to giue them The diseases of Bees, and the remedies.

them the stale of men, or Wallocke: as also the graines of the Pomegranate beaten, and sprinkled with Wine, or Razins, with the like quantitie of Manna kneaded togither, and giuen them in sharpe Wine, boyled in an earthen vessel, and powred into little Reedes. *Virgil* discribeth an hearbe called *Aumellus*, with a yellowe stalke, and a purple flowre, the iuyce of whose rote, being sodden in olde Wine, and strained out, is very good to be giuen them. *Columella* out of *Higinus*, teacheth to remidie them in this sort. First, to take out all the rotten and corrupt Coames, and to giue them freshe meate, and after, to perfume them with smoke. It is good also to put to a decaied Hiue, a newe swarme, as I said before. Many times, they die of a disease that they call the great deuouring, which happeneth when they haue made so much War, as they thinke they shall be able to fill, and afterwardes, by storme and tempest, many of them be destroied, so that the remaine sufficeth not to fill the Coames, whereby the emptie partes of the Coames becommeth rotten, and so by little and little infecteth both the Hony, and the Bées. For which the onely remedy is, either to put in a new swarme to fill vp the celles, or if you haue no such swarmes, to cut away part of the Coames before they come to be naught, which you must do with a very sharpe knife, for feare of displacing the rest of the Coames. A cause beside many times of the death of the Bées, is their too much prosperitie, as when there are diuers yeares great abundance of flowres, and the Bées so busie in their feeding, that they forget their breeding, who ouerwearying themselues with trauaile, they die, not leauing any brood behind them. It is called *Blapsigonia*, when either by sicknesse, slouthfulnesse, or barrainnesse, they leaue no fruit behind them. To remedie this, it is good euery thirde day, to shutte vp the Hiues close, leauing but very small holes, out of which they can not crepe, so shall they bee forced to loke to their brode, when as they can not otherwise range abroad. Many times besides they are the cause of their owne deathes, when perceauing their Hony to goe awaie, they fede too greedily. Their owne Hony doth also many times destroy them: for being touched with it on the backe, they are so limed, as they can not stur:

What hurts Bees.

and

and Oile doth not onely kill Bées, but also all other like creatures, Flies and Wormes. They hate all filthy sauours, and sting such as smell of oyntments: they are often besieged with Waspes, Hornettes, and great Gnattes: the Swallowe doth oftentimes spoile them: the Woodpecker doth with his long tong, thrust into the Hiue, like vppe their Hony, and diuers other Birdes (as I haue said before) annoy them. The Toade bloweth them, and sucketh them vp at their owne dores, who sustaines no hurt by their stinging. Sheepe are also hurtefull and troublesome to Bées, in whose fleeces, they so tangle themselues, as they can hardly get out. In the waste woodes of *Sarmatia*, where they make their Coames in the hollowe Firre trées, the Beare, for the desire of the Hony, climeth vp to them, and robbeth them. Against these Beares, the Bée keepers, vse to hang before their Hiues, great Paules and Bées, which the more angerly the Beare shoueth aside, with the greater sway they come vppon his head againe, whereby the Bées are well defended. The sauour of Creuisses, if any man boile them neare to them, doth kill the Bées: the *Ecco* is also a great enmie to them, that with her resounding, doth shake and feare them, and hurtfull to them is also the mist. The Spyder is also their deadly foe, and where they can preuaile, make hauocke of the Hiues, setting their webbes and nettes in euery corner, to ouerthrowe the poore Bée. The night Butterflie, that flieth about the candell, is hurtfull to them two waies: for they both consume the Coames, and of their excrementes lefte behinde them, is ingendred mothes, in the very wode beside, breedeth a Worme that consumeth the Wax. These hurtfull Vermine, the carefull keeper must diligently labour to destroye, and preuent, and looke that he plucke vp all such bushes and plantes, as offendeth them, not suffering any such to grow neere them: and to keepe all hurtfull cattell from them, letting them alwaies haue such things at hande, as they most delight in. For the keeper hath worke enough to turne him to all the yeere long: for after the twelfth of March, their Hiues must be opened and looked vnto, that al the Rubbish and filth of winter, may be swept away, and the Spiders that spoile the Coames, plucked out,

To keepe Bees frō Beares.

Hiues purged in the spring.

and that they may be ſmoked with ſmoke made of Dre doung, or linnen, (as I ſpake of before:) for ſmoke is of nature profitable to the Bées. And though it bée troubleſome for the time to them, yet is it certainly very holſome for them. The Wormes, beſides Mothes, and butterflies, muſt be killed, which cleauing like a peſtilence to the Coames, doe fall away if you mingle with your doung the Marow of the Dre, and laying it vpon the coales, make your ſmoke: with this order ſhall your ſwarmes bée kept ſtill in health, and ſhall bée better able to abide their labor: this kinde of purging them muſt be often vſed, from the Calendes of Aprill, till the fall of the Leafe. The kéeper muſt kéepe himſelfe (as I ſaide before) cleane from drunkenneſſe, lecherie, and all vncleane and ſtrong ſauering ſents: for they loue to be purely and faithfully loked vnto (as hath béen often ſaide) About an eight and fortie daies after the entring of the Sunne into *Aries*, they begin to ſwarme, and at the ſame time do many ſtockes periſh, that haue fewe and diſeaſed Bées. About the ſame time, are bredde in the vttermoſt parte of the Coames a brode of a great biggeneſſe: which ſome count to bée the kinges: others call them Bées, becauſe they courſe and chaſe the Bées, and therfore thinke it good to deſtroy them. From the riſing of the ſeuen ſtarres, that is, from the fifth Ides of May, till the tenth, or the twelfth of June, they vſe to caſt theyr ſwarmes, at which ſeaſon, they muſt be carefully loked vnto for going away: from that time, til the riſing of the Dogge, or the comming in of the dogge daies, which is almoſt thirtie daies (as *Columella* ſaith) the harueſt is both for Honie, and Corne. In what ſort the Hiues are to bée driuen and gelded, is ſhewed before: but at this time, and till the twelfth of September, the Hiues muſt be opened euery tenth day, and ſmoked. The Hiues being thus ſmoked, you muſt refreſh the Bées, with ſprinckling and caſting into the emptie partes of their Hiues, verie freſh and colde water: and if any thing remaine, not waſhed away, you muſt ſwéepe it out with a Goſe wing. Beſides, the Mothes, if they appeare, muſt bée ſwéeped away, and the Butterflies killed, which dwelling in the Hiues, are commonly a bane to the Bées: for they both eate vp the Wax, and with

Smoke good for Bees.

Oeſtri.

Times for ſwarming.

their

their young, doe breede a kinde of Worme that they call Hiue Mothes. These Butterflies, as *Columella* teacheth, you may when the Mallow flowreth (at which time there is greatest number of them) destroy in this sort. You must haue a vessell of Brasse very high and straight, narrowe necked and mouthed, in the bottome whereof, you must haue a light, and set it in the euening neare vnto your Hiues, and you shall see all the Butterflies straightwaies fall to the light, and while they play about the flame, they burne themselues, while they can neither get vp, by reason of the straightnes, nor shun the fire, by meanes of the brasen wales. Betwirt the risinges of the Dogge, and of the Bearward, which are almost fiftie daies, you must take good heede your Bees be not spoyled by Hornettes, which at that time lie in waite for them, euen at their owne doores. After the rising of the Bearward, about the twelft, or fourteenth of September, is the second haruest of your Hony: from that time, till the setting of the seuen starres, which is about fourtie daies, the Bees do prouide for their winter store, of the flowres of Heath, Tamariske, and other bushes and shrubbes, of which prouision you must take nothing, lest you discourage them, and driue them awaie: from the setting of the seuen starres (which is about the entrance of Nouember) the beginning (if we may beleeue *Plinie*) of Winter. The Bees liue all the Winter long, vpon such store of Hony, as they haue laid vp: at this time, the Hiues must bee opened and cleansed of what so euer filth is in them, and diligently ordred, for during the winter time, your Hiues must neither bee opened nor stirred, and therefore in the ende of the Sommer, while the weather is yet mild and temperate, your Hiues being made cleane in some sunny day, see that you thrust vnder them, certain close couers that may reach to the very bottome of the Coames, not leauing any voide space, whereby the Hiue shall be the warmer. When you haue this done, close vp euery rift and open place with Clay, and Bullockes doung mingled togeather, dawbing it all ouer without, leauing onely a little hole to come in and out at. You must arme them also against the cold and tempest, with good couertures of strawe and bowes. Some vse to put in the Hiues, small

To destroy butterflies.

No sturring of Bees in Winter.

small Birdes being drawen, which wyth their feathers kéepe the Bées warme all the Winter, and wherewith, if they happen to lacke fode, they féede themselues sufficiently. Yea, it hath béene séene they haue so fedde vppon them, as they haue left nothing but the bare bones: howbeit, as long as their Hony suffiseth, they neuer meddle with the Birdes. It is very good and necessarie (as I tolde you before) to set them meate in little Troughes of Réedes, to defend themselues against famine. When Winter is past, in the space of fortie daies, they make an ende of all their Hony, except their kéeper deale the more liberally with them. It hath often also béene séene, that their Coames being emptie, they haue continued fasting, till the Ides of Februarie, and cleauing to the Coames, as if they were dead, haue yet retained their life: but least they shoulde lose it altogether, it is good to powre them in some swéete licours by little Pipes, whereby they may sustaine their liues, til the Swallow with her appearing, promise a welcõmer season. After which time, when the weather will suffer them, they begin to séeke abroad for themselues: for after the Sunne is in the *Æquinoctial*, they neuer rest, but trauaile painefully euery daie, and gather flowres, and necessaries for their bréeding. Besides, because fewe places are so fruitefull, as they yéelde flowres both Sommer and Winter: therefore in such places, where after the Spring and Sommer (at which times, both Beanes, Rapes, Willowes, and other plantes and hearbes, in euery place do flowre) the flowres doe faile, they are carried of diuers (and that in the night, as I tolde you before) into such places, wheras there is good store of late flowring hearbs, as Time, wilde Marierum, and Sauery, wherewith they may be fedde, gather fode at their pleasure, and, as *Columella* writeth, that Bées in the olde time, were brought from the féeldes of *Achaia*, to the Pastures of *Athens*, and so transported in diuers other places. So may we with vs carry them, from places where the flowres be consumed in the Spring, to the Sommer flowres, as Clouer, and such other: and after that, about the ende of the Sommer, to places furnished with Heath, Tamariske, & such other late bearing flowre. For the auoiding of

this

this inconuenience of carrying from place to place, I wil shewe you in what sorte I haue ordered my Bées yard at home. And because Master Herbach hath shewed you before in his Garden many good hearbes, and yet not whereto they serue, I will shewe you a fewe plantes that I haue set about my Bées, seruing both for their commoditie, and the health of my housholde. I haue chosen of a great number, such as bée most necessarie, and of greatest vertue: whose speciall vertues, and wonderfull workinges, giuen onely by the most gratious and bountifull framer of the World, and being as it were sucked and drawen out by the carefull toile and diligence of the Bée, must néedes adde a greater perfection to their Hony, and their Ware. I haue first enclosed the Yarde, where my Bées stande, with a Quickset hedge made of Blacke thorne, and Honysocle, the one of them seruing the Bée with his flowres at the beginning of the spring, and the other at the later ende of sommer. The first, the Blackethorne beareth a pleasant white flowre, so much the welcomer to the Bée, as it is the very farewell of the Winter: for hée commonly flowreth not till the Winter bée past. These flowres newly gathered and steéped all a night in the best and strongest Wine, and afterwardes destilled in *Balneo Marie*, being drunke, helpeth any paine in the sides, as hath béen certainely proued. *Tragus* the Germane confesseth, that with this onely water, he hath cured all maner of paines about the stomacke, hart, or sides. Wine made of the Sloe, and preserued vntill July, or August, when the bloddie flire most raigneth, is a soueraine medecine against it. The other, the Honysocle, or Woodbine, beginneth to flowre in June, and continueth with a passing sweéte sauour, till the very later ende of the Sommer. The water thereof distilled and drunke, two or thrée daies together at times, asswageth the heate of the stomacke, helpeth the Cough, and shortnesse of breath. Ragges of linnen dipped therein, and applied, doe heale any heate of the Eyes, or Liuer. Nert vnto my Hiues, I haue planted the sweéte hearbe *Melissa*, or *Apiastrum*, called in Englishe, Balme, with a square stalke, a leafe like a smoth Nettle, and a yellow flowre, and groweth almost in euery Hedge, an hearbe well knowen to the olde

Blackthorne.

Woodbine.

Balme.

olde Women in the Countrey, and greatly desired of the Bée. This *Melissa*, or Balme, sodden in white Wine, and drunke two or three mornings together, purgeth the breast, helpes the shortwinded, comforteth the hart, driueth away the dumpishe heauinesse, that proceedeth of Melancholy, helpeth the falling sickenesse, and almost all other diseases: being chopped small, and steeped a night in good white Wine, and afterwards distilled, is greatly commended, not only in deliuering women from their pangues and griefes of the Mother, being drunke to the quantitie of three or foure Sponefuls, but also cureth the pains or fainting of the heart, called commonly the passion of the hart. *Cardamus* greatly commendeth this hearbe, for the comforting and renuing of a decayed memorie, and affirmeth, that it is a causer of sweete and pleasant sleepes. Nert vnto this haue I growing that sweete and precious hearbe *Angelica*, whose seedes I first receiued from that vertuous and godly ladie, the ladie Golding in Kent, a gentlewoman that setteth her whole felicity in the feare and seruice of the almighty: this hearbe is in flowre, seede, leafe, stalke, and sauour, so like vnto Louage, as they may hardly be discerned the one frō the other, the leafe doth in manner resemble the Figge leafe, sauing that it is more iagged, and indented rounde about. If any man be suddenly infected with the pestilence, feuer, immoderate sweat, let him take of the roote of this *Angelica* in powder, halfe a dramme, and putting to it a dramme of Treacle, mingle them together with three or foure spoonefulles of the water destilled of the said roote, and after he hath drunke it, let them lie & sweat fasting, for the space of three houres at the least: thus doing, by the helpe of God, hée shall escape the daunger: the roote steeped in Vineger and smelt vnto, and the same Vineger sometimes drunke fasting, doth preserue a man from the pestilence: to be short, the roote and the water thereof, is souerain against al inward diseases, it scowreth away the collections of a Plurisy beginning, helpeth vlcered and corrupted Lonnges, and is good against the Collicke, Strangurie, and restraint of Womens Purgations, and for any inward swelling, or inflamation, the iuice thrust into a hollow tooth, allwageth the paine, the water

Angelica.

For want of Treacle, you may take the whole dramme.

dropped

dropping into the eare, doth the like: the saide iuice and water put into the eie, quickeneth the sight, and taketh away the thin skins & rines that coureth the eie. Besids, a most present remedy in all deepe & rotten sores, is the iuice, the water of the powder: for it clenseth them, and coureth the bone with good flesh. It was called in the olde time *Panacea*, or *Healeal*. Nert vnto this *Angelica*, haue I growing in great plentie, *Cardus Benedictus*, or blessed Thistle, which the *Empirickes*, or common *Proalisers*, doe commend for sundrie and great vertues, affirming, that it was first sent out of *India*, to *Fredericke* the Emperour, for the great vertue it had against the headache, or megrime, being eaten or drunken. Likewise they say, it helpeth against the dasing, or giddinesse of the heade, maketh a good memorie, and restoring the hearing. For the prose of his great force against poison, they bring forth a yong maiden of *Pany*, that hauing vnwares eaten of a poisoned Apple, and therewithall so swolen, as no Treacle, nor medicine could cure her, was at the last restored to health, by the destilled water of this Thistell: and likewise that a boy, into whose mouth as he slept in the fielde, happened an Adder to crepe, was saued by the drinking of this water, the Adder creeping out behind, without any hurt to the child. In fine they affirm, that the leaues, iuice, seede, and water, healeth all kind of poisons, and that the water hath healed a woman, whose brest was eaten with a canker to the very Ribbes. I haue also set in this little peece of grounde, greate store of the hearbe called *Namularia*, or Penigrasse, which creepeth close by the ground, hauing vpon a long string little round leaues, standing directly one against the other, and a yellow flowre, like the Crowfote. It is a souerain hearbe for healing of wounds, not onely outward and greene wounds, but also inward sores and vlcers, specially of the Longes, wherof there hath been good prose. *Tragus* affirmeth, that he hath seene dangerous and desperate wounds cured with this hearb, being boiled with Hony and Wine, and drunke. It healeth exulcerations of the breast and Longes, and may be well giuen to those that cough, and are short breathed, and to little children diseased with the dry cough, who by reason of their tender age may take

Cardus Benedictus.

Penigras.

take no stronger medicine. I haue seene good plentie of it growing by the shadowy Ditches, about great Peckam in Kent. I haue beside there growing *Scabious*, an hearbe that groweth commonly in Corne, with a iagged leafe, lying round vpon the ground, and thrusting out in Sommer a long stalke, wyth sundry branches, the flowre growing in blewe knoppes, or tuftes, like Honicoames. This hearbe being sodden with white wine, and drunke, doth helpe the Pluriſie, against which diseases, the women of the countrey, that many times take vpon them to bee great *Doctresses* in Phisicke, do still the water thereof in May, and giue it to be drunken at each time, two or three spoonefuls, not only against the Pluriſie, but against inward impostemes, coughs, and all diseases of the breast. Against impostemes, diuers (as *Tragus* writeth) doe make this composition, they take a handfull of *Scabious*, the hearbe dried, of Liqueriſſe cut small an ounce, twelue Figges, Fenell seede an ounce, Aniſeede as much, Dates halfe an ounce, these they lay all a night in water: the nert day they boile them, till a third part be consumed, and after making it sweete with Suger, or Hony of Roses, they giue it warm in the morning and the euening, wherwith they say, the impostume is ripened, made soft, and cought out.

Scabious.

Veronica

PVLLARIVS. I remember, that passage by the house of that honorable Baron, the Lorde Cobham (whose house you shal seldome see without great resort, by reason of his noble disposition, and honourable intertainement that hee giueth to all commers) I chaunced to see in his Parke at Cobham, a certain herbe called *Veronica*, wherof I haue heard vertues.

MELISSEVS. That can I also shewe you amongst the hearbes that I haue about my Bees: it is called of some *Feuerfuum*, and *Veronica*, as it is supposed of a certaine French King, who was thought by the iuice thereof, to bee cured of a great Leprosie, it is called in English Fluellin: it creepeth low by the ground, as Penigraſſe doth, and beareth a leafe like the Blackthorne, with a blewish speckled flowre, with a seede inclosed in little powches, like a shepheardes purse, and groweth commonly vnder Okes. *D. Hieron* writeth, that the force thereof, is marueylous against the Pestilence, and contagious ayres,

ayres, and that he himselfe hath often times proued. The water of the hearbe steeped in white Wine, and destilled therewithal, he hath cured sundrie times, hot burning and pestilent feuers, as well in yong men, as in old. *Hieron Transchweyg*, commendeth it to bee singular good for all diseases of the Splæn: the shepheardes of Germany, giue it with greate profite made in powder and mingled with salt, to their cattell diseased with the cough, being steeped in Wine and destilled, it is a most present remedie in all Pestilent feuers: being geuen two ounces thereof with a little Treacle, and after laied warme in bedde, and well couered, it expelleth the poison by sweate, and driueth it from the hart. The water of this hearbe taken certaine daies together, two ounces at a time, helpeth the turnesicke giddinesse of the heade, voideth fleame, purgeth blood, warmeth the stomacke, openeth the stopping of the Liuer, healeth the diseases of the Longes, and the Splæn, purgeth the Vaines, the Matrice, and the bladder, it driueth out sweat and venome, helpeth the Jandise, the stone of the Reines, and other grieuous diseases. You shall also haue amongest these plantes of mine, the good sweete hearbe *Cariphilata*, or of some *Benedicta*, of thers, *Sanamanda*, called in Englishe *Auens*, whose rote whether it be græne, or olde, resembleth the Cloue in sauour: the leafe is iagged, rowffe, of a darkish græne, and not much vnlike to *Agrimony*: the flowre is yellow, and after the falling thereof, leaueth a prickly knoppe like a Hedgehogge: the rote, the longer it hath growen, the sweeter it is: the speciall vse of this rote in some countries, is to be put in Wine in the spring time: for it maketh the Wine to taste and sauour very pleasantly: which Wine, as many holde opinion, doth glad the hart, openeth the obstruction of liuer, and healeth the stomack, that is ouer burdened with cold and grosse humors: this rote boiled in Wine and geuen warme, doth ease the griefe of the stomacke, or the belly, proceading of either colde, or winde. Hard by this hearbe, haue I planted the greate water *Betony*, called of some, *Ocimastrum*, of *Mathiolus*, *Scrophularia Maior*: it hath a greate square stalke, and bigg leafe indented round about: the flowre is in colour Purple, and in fashion like the Shell of a Snaile: Auens.

Snaile, it flowreth in June and July, and groweth most by waters in shadowy places. *Tragus* teacheth to make a speciall oyntment thereof, seruing against all Scabbes and Sores, wherewith he saith, he hath seen people so mangie, as they haue seemed euen Lepers to bee cured: his oyntment is this. Take the hearbe, rootes and all, gathered in May, washed and well clensed from all filth, stampe it, and straine out the iuyce, and keepe it in a narrowe mouthed Glasse well stopped, wherein you may keepe it a whole yeere, and when so euer you list to make your oyntment, take of the same iuyce, of wax and Oyle, of eche a like quantity, & boile them together vppon a Chafindish of coles, stirring them well, till they bee incorporated, and so vse it. *Mathiolus* teacheth to make a singuler ointement thereof against Kernels, the Kings euill, and the Hemerodes: his order is this. You must gather the rootes in the ende of sommer, and after that you haue made them verie cleane, stampe them together with fresh Butter, and putting them into an earthen vessell close couered, set them vp in some moist & dampish place, suffering it there to remaine for the space of fifteene daies: afterwardes, let the same Butter bee melted with a soft fire, and being well strained, lay it vp for your vse. There haue

Cardiaca

I also an other excellent hearbe, called in Latine *Cardiaca*, I know no name for it in English, except you will cal it Motherwort, and indeede it is the verie true Motherwort: it groweth by highwaies, and neere to stone walles, it hath a leafe something like a Nettell, but more indented, the Leaues next to the roote being iagged like the Crowfoote: it groweth bushing with many stalkes, I haue seene it plentifully in Surry, and some store of it about Maidstone in Kent: it is of great force against any sicknesse of the hart, whereof it taketh his name: it helpeth Crampes & Palleys, it clenseth the breast from fleame, it killeth Wormes in the body, openeth cold obstructions, prouoketh vrine, and Womens Courses: being made in powder, and a sponefull of it giuen in Wine, it wonderfully helpeth the hard labours of Women.

Betony.

CHENOBOSCVS. I maruaile you haue no store of *Betony* also: for I haue seene the Bees labor diligently vpon it,

and

and haue heard, that it is of great vertue.

MELISSEVS. I haue great store in deede of it, but that I forgate to tell you of it, it is knowen so commonly, as I neede not to describe it vnto you: whosoeuer is troubled with breaking of wind and weakneſſe of ſtomack, and thoſe whoſe ſtomackes retaine not their meate, or whoſoeuer feeles sowre belching from his ſtomacke, and is therewith often troubled, let them continually vſe *Betony*, either the hearbe and flowre boyled in Wine, or the water diſtilled, or the Conſerue (as they cal it) of the flowres. And if ſo be you lacke the Conſerue, or the water you may vſe the dry hearbe in powder, either by it ſelfe, or with Hony: women that are troubled with the mother, may vſe this hearb for their remedie. To be ſhort, the flowre, leafe, and rote of *Betony* ſodden and drunke, or howſoeuer you wil, in Electuarie, Conſerue, Sirope, Potion, or powder, as you liſt to take it, is ſinguler good in the diſeaſes of the Stomacke, Liuer, Spleene, Kidneies, and Bladder, it freeth the Matrice from obſtruction, and draweth from thence all hurtfull moiſtures. For conſumptions of the Lunges, Coughes, Dropſies, continuall and putrified Feuers, proceeding from the Stomacke, boile the leaues and flowres of *Betony* in Honied Water, and you ſhal haue preſent help. Thus haue I ſhewed you what kind of hearbes I haue planted about my Bees, to the ende they ſhould haue foode at hand of the ſweeteſt, and the holſomeſt: I haue ſhewed you alſo the vertues of the hearbe, the flowre, and the water. that you may vſe for your owne commodity: onely this warning I giue you, that you doe not diſtill them, as the vnſkilfull doe, in ſtilles of Lead, Tinne, and Braſſe, which poiſoneth and ſpoileth the water, but in Glaſſe Stils, ſet in ſome veſſell of water vpon the fire, whereby your water ſhalbe moſt perfect and holſome. The difference of theſe two diſtillings, appeareth plaine: for example, in Wormwood, which if you diſtill in your common Stillatories, the Water commeth out ſweete, hauing gotten a corrupt quality by the nature and corruptiõ of the mettall: whereas, if you do it in Stils made of Glaſſe, looking that the Glaſſes bee well cloſed round about, your water ſhall haue the very taſte, ſauour, and propertie of the hearbe.

With these Glasse Stilles you may so order your fire, as you may drawe out of euery hearbe, the Water, Spirite, Oyle, and Salt, to the great comfort of sicke and diseased persons. I set besides great plentie of Sauery, Heath, Tamariske, and without the Beeyarde, Broome, in whose flowres the Bée much delighteth. I keepe you here peraduenture too long in so small a matter.

Small is the thing, yet small is not the gaine:
If grations gods permitte, and Phœbus not disdaine.

As the heathen Poet writeth: but I will here make an ende of my talke, that hath perhaps béen thought too long.

FINIS.

Soli Deo.

¶ Olde Engliſh rules, for purchaſing Lande.

Who ſo wilbe wiſe in purchaſing,
Let him conſider theſe points following.

FIRST ſee that the lande be cleare,
In title of the ſellar.

And that it ſtand in danger,
Of no womans dowrie.

See whether the tenure be bond or free,
And releaſe of euerie feoffee.
See that the ſeller be of age,
And that it lie not in morgage.

Whether a taile be therof found.
And whether it ſtand in ſtatute bound.

Conſider what ſeruice longeth thereto,
And what quitrent thereour muſt go.

And if it be come of a wedded woman,
Thinke thou then on couert baron.

And if thou may in any wiſe,
Make thy charter with warrantiſe.
To thee, thine heires, aſſignes alſo,
Thus ſhould a wiſe purchaſer do.

1586.



¶ Imprinted at London for Iohn Wight, dwelling in Paules Church-yarde, at the great Northdoore of Paules.

Anno Domini.

1586.

as if it had beene ripely debated and decreed by all the Vniuerſities in Europe: yea (a horrible thing) as if it hadde proceeded from the ſacred mouth of GOD. And who can tell, whether theſe bee their thoughts alreadie: which they ſmother, vntill ſuch time as they haue gotten an armie to execute them.

A number in this lande, vppon a falſe alarme, haue beene in a vaine iealouſie and feare of Puritaniſme. Nowe the iuſtice of GOD hath payed vs. For that which was ſpoken before in ſlaunder, nowe may bee ſpoken in trueth: and that which was beleeued, when it was not, is ſcarce ſuſpected when it is. For if you ſeeke after the Puritans, theſe they bee. Which although for their looſeneſſe of life, they are from the toppe to the toe nothing but blottes: yet bragge they of all perfection, euen vnto a verie deifying of themſelues, what miſchiefe therefore yee feare might come from the Puritans, that looke for aſſuredly at their handes. Iud. 12.

Howbeit the ouglineſſe of this Hereſie which ſhoulde driue to a feare, doeth (as it ſeemeth) make men careleſſe of it. For they thinke that ſuch a monſtrous miſhapen hereſie, ſhoulde finde louers either verie fewe, or if anie number: yet ſuch ſweepinges of the people, as may, at good leyſure, eaſily bee caſt out. For the firſt whereof, they little knowe either what the corrupt nature of man is: or what is the deſert of the contempt of the Goſpel amongeſt vs. For there is no wickedneſſe ſo groſſe, the print whereof our waxie and pliable nature to all euill, is not meete to receyue: and it is the Lordes iuſt iudgement, that they which haue deſpiſed the higheſt wiſedome, ſhoulde be throwne into the extremeſt follie.

And if anie hartning were taken, in that they are of the raſcall ſort. Firſt it is not generally true: theſe ſhameleſſe dogges thruſting themſelues (for a fatter ſoppe) into houſes of great wealth. Secondly their baſeneſſe, ſhoulde not free vs from the feare of them: if we remember that the Iuie which is ſo deſpiſed and ſo lowe a ſhrub, doth in climing by little and little, kill the talleſt and mightieſt Oake in the forreſt. Take example firſt of *Demetrius* the Siluerſmith, who ſet the whole Citie in an vprore, agaynſt the Goſpel: and then of *Alexander* the Copperſmith, of whom by the complaintes which Saint *Paule* maketh of him, and imprecations againſt him: it is apparaunt, that he had by him receyued more hinderance in his miniſterie, then by anie other, either Doctours of the Lawe, or Princes of the common wealth. And if they were ſo ſtrengthleſſe, as they be ſuppoſed: yet the ſwarmes of them ſhoulde cauſe men to bee waking, vnleſſe they haue forgotten, that neither all the wiſedome nor power of Egypt, was able to reſiſte the armie of Lice, which the Lorde ſente againſte them. And it is to bee feared, leaſt this louſie cõpany of the familie of Loue, be ſtirred vp, not onely to beat vs, but as it were to dry beate vs: that like as the Goſpell hath beene mocked amongſt vs, ſo the Lorde ſhould choſe him ſuch rods, wherwith he might as it were in great ſcorne and diſdaine ſtrike vs againe. Such were the *Hunnes*, *Gothes*, & *Vandales*, which being rayſed out of the dunghil, and men of whome ther was no reckoning made: yet had they ſuch ſtrength through the weake profeſſion of the Goſpel, ſuch greate ſucceſſe through the ſmal ſucceſſe therof, ſuch ſwiftneſſe through the ſlackneſſe in it: that ſetting vpon the mightieſt and moſte warlike nation in the world, they made in ſhort time ſuch a hãd of them, as if men had had to do with Mice, or fire had

Acts. 19. 23.

2. Tim. 4. 14.

met

met with Stubble: ſuch a woonderfull GOD is the Lorde, who as he oftentimes in mercie, deliuereth his by thinges of nothing: ſo againe in wrath, Lee plageth them by thinges of like value.

But peraduenture, as the verie name of the houſeholde of loue, is their great glory: ſo it may breede in vs an opinon of their harmleſneſſe. For who can feare any euill from loue, which doth good to all, and hurteth none. Howbeit adde only (which the trueth it ſelfe doth prooue) that it is the houſholde of Selfeloue: and then what miſchiefe is there, whiche wee may not make iuſt account of, if their handes be as able to deliuer it, as their heartes are frutefull to conceiue it. For except a fewe faire ſpeaches, wherewith they would (forſooth) approue them ſelues to bee led with the ſpirit of Loue, and which are rather a cloke to couer their hatred againſt vs, then any wholeſome fruite of vnfained loue: their loue is ſo lame, that it cannot ſteppe a foote out of their owne doores. And as we haue nothing to truſt to in this title, ſo they in vaunting them ſelues of it, doe but glorie in their owne ſhame. For I can as well affoord it them, to the diſcouerie of their owne fylth, as the name of Ieſuites vnto the Papiſtes, which pride themſelues therein. For as they leauing the title of Chriſtiãs cõmended to vs in the holy ſcripture, Acts. 11. and coyning a new of their owne braine, carrie the note of their intollerable arrogancie in their forehead, red of all which vnderſtand anie thing of Chriſtian modeſtie: euen ſo alſo is it in this vermin. For beſides their pride, whereby they haue ſought them ſelues a title apart from others: what an intollerable arrogancie is it, to leaue the titles of the ſcripture, for a liking they haue Gal. 6. to thoſe of their owne forge? For if they would needes ſingle themſelues by a ſeuerall name: why tooke they not the name of the houſeholde of fayth mencioned in

 the

the Scripture, rather then the name of the houſeholde of Loue, wherof there is no ſuch mention.

The ſame or not vnlike iudgement, of their ſtrange phraſes, wherewith they apparell and ſet foorth their ſtraūge opinions & deuiſes: that to thoſe which haue their ſences wel inured to diſcerne of doctrines, it will be as eaſy thereby to diſcry their new learning, as it is to know an outlandiſh man by his toung or ſpeach. For they are ſo ſwelling, as if they had feared leaſt they ſhould not haue beene ſufficiently knowen, to bee of thoſe deceiuers, which the Apoſtles Saint *Peter* and S. *Iude* haue marked out: vnleſſe they had ſhewed vs this brande, which the holie Apoſtles did ſet vpon their tounges. Albeit to ſay the trueth, in this manner of handeling, there is not more pride, then crafte and deceite. For therefore, no doubt, doe they ſo farre paſſe and exceede the meaſure of the common ſpeach: that the ruder ſorte not able to vnderſtand them, beeing aſtonied, might be as it were hanged in an admiration of them. Whereof if I ſhould giue you a paterne, I could not doe it more aptely then in ſending you to the gibberiſh of our Rogues, or of the counterfait ſort of Egyptians: which were woonte to haue a ſpeciall chat: wherewithall they amazed the ſimple men, whileſt they drewe them into their nettes. Whatſoeuer it is, it is moſt vnlike the language of the holie ſpirit of God. For in ſteede that it doeth vtter graue and high matters, in a lowe and familiar ſtile: they ſet forth their trifling and halfepeny doctrines, with loftie and high phraſes of ſpeech.

2. Pet. 18. Iude, 16.

Nowe it remayneth, that for the glory of God ſo ſhamefully defaced, for the trueth ſo ſlaunderouſly reported, for the Church ſo grieuouſly ſtricken, for the common wealth preſently wounded, & further hazarded